EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION PACKAGE ON HOME CARE MANAGEMENT SUBJECTED TO CARDIO THORACIC SURGERY AMONG MOTHERS OF CHILDREN

DISSERTATION SUBMITTED TO

THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI

In partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE IN NURSING

APRIL, 2011

A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION PACKAGE ON HOME CARE MANAGEMENT SUBJECTED TO CARDIO THORACIC SURGERY AMONG MOTHERS OF CHILDREN AT FONTIER LIFELINE HOSPITAL, CHENNAI – 2010

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ACKNOWLEDGMENT

I would like to thank Lord Almighty without whose blessing, wisdom and direction anything is possible.

I express my gratitude to the Chairman**, Dr.Rangarajan**, Vice chairman **Dr.Sagunthala Rangarajan**, Directors and Managing Trustees of Vel R.S Medical College – College of nursing, for having given me this opportunity to undergo the post graduation program in this esteemed institution.

I consider myself fortunate to have been piloted by **Prof. Mrs. M.Anuradha, R.N., R.M., M.Sc (N),** Principal, Vel R.S Medical – College of Nursing, whose guidance and support enabled me to do the work. I shall always be thankful to her for constant encouragement, valuable –in depth discussion and suggestions throughout the study.

I take this opportunity to thank professor **Ms.K. Sudha Devi,R.N., R.M., M.Sc (N).,** Vice principal, Head of the Department, Medical-Surgical Nursing, Vel R.S Medical College – College of Nursing, for her guidance and encouragement to carry out this dissertation.

I express my whole hearted thanks to **Mrs.D.Indra**, **R.N., R.M., M.Sc (N).,** Reader, Vel R.S Medical College – College of Nursing for her support, expert guidance and encouragement to proceed with the study.

I express my sincere thanks to **Mrs.V.Bhavanipriya R.N., R.M., M.Sc(N).,** Lecturer, Community Health Nursing, Vel R.S Medical College – College of Nursing, Chennai, for constant support and expert guidance throughout this dissertation.

I like to convey my sincere thanks and heartfelt gratitude **to Mrs. Bindhiya, R.N, R.M., M.Sc.(N)., Lecturer**, Pediatric Nursing, Vel R.S Medical College – College of Nursing who has guided me from the initial step of my study and motivated me a lot to update my study.

I am greatly indebted to **Mrs.Florence, R.N, R.M., M.Sc.(N).,** Lecturer, Pediatric Nursing, Vel R.S Medical College – College of Nursing, Chennai, for her constant guidelines and support throughout this dissertation.

I express my thanks to **Dr.Sylvester**, Intensivist, Frontier Lifeline Hospital, Chennai, for granting permission to conduct my study.

My sincere thanks to **Dr.Sathyan**, M.B.B.S., D.C.H., for validating the tool of my study.

It gives me great pleasure to thank **Prof.Mrs.Anitha Rajendra Babu**, R.N, R.M., M.Sc(N)., Pediatric Nursing, Principal of Rajalakshmi College of Nursing, for her help in evaluating the tool for my study.

It gives me great pleasure to thank **Mrs.Hebsibah**, R.N, R.M., M.Sc(N)., Pediatric Nursing, Reader of Ramachandra College of Nursing, for her help in evaluating the tool for my study.

I would like to thank, **Mrs.Susan, R.N, R.M., M.Sc(N)** HOD of Pediatric Nursing Department, Omayal Achi College of Nursing, Chennai, for her help in evaluating the tool for my study.

I thank **Mrs.Zealous Mary**, R.N, R.M., M.Sc(N), Lecturer, Madha College of Nursing, for her guidance and continuous support throughout my study.

My sincere thanks to **Dr.Shanthi**, M.B.B.S., D.C.H., D.N.B., for validating the tool of my study.

I take this opportunity to thank **Mr.Thennarasu**, Biostatistician, Shankara Nethralaya Hospitals, Chennai, for his assistance in statistical analysis and presentation of data.

I would like to convey my thanks to **Mr.C.Anbalagan, M.A., M.Ed., M.Phil.,** and **Mr.S.Ramalingam, M.A., M.Phil., B.Ed.,** for their immense help in Tamil and English editing for my study.

I would like to thank the entire **M.Sc (N) faculty members** of **Vel.R.S.Medical College-College of Nursing** for their suggestions and guidance.

I take this opportunity to thank all my **colleagues**, **teaching** and **non-teaching staff members**, **librarians** and **office staff members** of Vel R.S Medical College – College of nursing for their co-operation and help rendered.

My deep gratitude to **Mr.G.K.Venkataraman**, Elite Computers, Avadi for his immense patience and skills in completing the dissertation.

Words are beyond expressions for meticulous effort and guidance of my beloved husband **Mr.V.Sivakumar**, **B.P.T.,** for whole consent, encouragement, support and funding, otherwise this work would not be successful completion.

Above all, I offer praise from the depth of my heart to my beloved parents, sisters and my in-laws, and my brother in law **Mr.V.Jayakumar, M.Sc., M.Phil.,** for their encouragement towards the successful completion of my study.

It would be a lapse on my part if I fail to thank my **Baby. Moshika,** for her patience throughout my study.

Last but not the least I would like to express my thanks to the **study participants** for their co-operation and participation, without whom this study would have been impossible.

K.M.KAMATCHI

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ABSTRACT

Children are the future of our society and special gifts to the world. The birth of an infant with congenital Heart disease is very stressful for parents. According to American Heart Association congenital heart disease occurs in approximately 1% of live birth per year nationally. Mothers are routinely held responsible for the care of children. Mothers of children with congenital heart disease must assume the role of caregiver soon after surgery.

A study was conducted to assess the effectiveness of Information Education communication package on home care management subjected to cardiothoracic surgery among mothers of children in Frontier Lifeline Hospital, Mogappair, Chennai, 2010- 2011. The objective of the study was to assess the pre test level of knowledge and post test level of knowledge on home care management among mothers and compare the effectiveness of information education communication package and association of the post test level of knowledge with their demographic variables.

The study was conducted by adopting pre-experimental one group pre test post test design. 30 mothers of children who have fulfilled the inclusion criteria were selected by using non probability purposive sampling technique. The conceptual framework adopted was based on Roy's adaptation model.

In this study, by using assisted self administered questionnaire, a pre test was done which revealed that 24 of them had inadequate knowledge and 6 of them had moderately adequate knowledge. After giving information education communication package (pamphlets and video clippings) on home care management a post test was done. Analysis revealed that there was a significant improvement in the level of mother's knowledge.

Therefore, Information Education Communication package can be used as a safe and effective tool, which helps in improving the level of mother's knowledge.

CHAPTER – I

INTRODUCTION

"Children are the sum of what mothers contribute to their lives".

-Zig Ziglar

Children are the future of our society and special gifts to the world. Children need accessible, continuous, comprehensive, coordinated, family centered and compassionate care that focuses on their changing physical and emotional needs. .Pediatric nursing is based on atraumatic therapeutic care and evidence-based practice. In this the philosophies of pediatric nursing is family- centered care. Family centered care enhances parents' and caregivers confidence in their own skills and also prepares children and young adults for assuming responsibility for their own health care needs.

The birth of an infant with congenital Heart disease is very stressful for parents. Congenital Heart Disease is a common clinical entity and occurs in 0.8% of live Newborns. According to American Heart Association congenital heart disease occurs in approximately 1% of live birth per year nationally, making heart defects the most commonly occurring birth defect.

Surgical interventions are typically carried out in the early neonatal period while parents are still distressed about the infants' diagnosis. It is not surprising that extensive parental anxiety is common after an infant's cardiac surgery even though advances in medical technology and techniques have decreased mortality rates.

Mothers are routinely held responsible for the care of children, mothers of children with congenital Heart disease must assume the role of caregiver soon after surgery therefore, they not only have to deal with impact of the birth of a child with congenital Heart disease, but must learn specialized care giving tasks.

The primary care provider will often be the person who first encounters the child with congenital Heart Disease. The major signs of the serious congenital Heart disease are central cyanosis, tachycardia, hepatomegaly, respiratory distress, a gallop-rhythm,

lethargy, and lack of spontaneous movement, decreased or unequal brachial pulses. Children with congenital heart disease require the same health care maintenance that the other children receive. However, there are certain areas that need special consideration in these children such as growth monitoring, nutrition, development, immunization, physical activity and dental care.

The child's age at the time of operation for repair of congenital heart defect affects catch up length and weight. Improvement in height, weight and head circumference depends on the calorie requirement of infants, but this need increases for a child with congenital heart disease. Nutritional intervention should include increasing the volume of caloric intake as tolerated, assessing the mother or child interaction during feedings. Carefully increasing the caloric density of formula by increasing the concentration and adding carbohydrates or fat, and giving smaller and frequent feedings may enhance the growth and development of these children.

Child with congenital heart disease should receive the recommended immunization schedule without any absence. Children should be observed for any presence of side effects of received vaccinations. Congenital heart disease is not a contraindication to maintain the recommended immunization schedule, except after heart transplant. Children with CHD should receive additional immunization, such as influenza and pneumococcal vaccines.

Dental care in children with congenital heart defect is an important consideration from the time they get their first tooth because of the risk of bacterial endocarditis. Preventive dental care, including good oral hygiene and regular visits, will result in a healthy mouth thus eliminating the need for extractions. Dental visits every 6 to 12 months starting at two to three years of age are important.

Children with congenital heart defect are encouraged to maintain an active life style to the best of their physical abilities. After complete repair of most cardiac defects, participation in sports is allowed. Physically active children show improvements in a wide variety of measures of psychological well being, self confidence and self esteem which enhances one's quality of life. Since most parents of children with congenital heart disease

are unaware of postoperative home care management. The information education communication package has been adopted as a measure to impart knowledge in this study.

BACKGROUND OF STUDY

Growth in children with congenital heart defect is often compromised in varying degrees. Malnutrition and failure to thrive are well-documental sequence of hemodynamically significant. A recent study conducted on growth patterns of 32 infants with complex congenital heart defect found that 14 (44%) infants were below the fifth percentile for weight at 6 months of age. The causes are multifactorial and may indicate increased oxygen consumptions; inadequate energy intake impaired absorption, difficulty in feeding or associated congenital anomalies.

Pediatric cardiac care in India is still in its infancy. The burden of congenital heart diseases in India is likely to be enormous, due to a very high birth rate. About 2 to 3 per 1000 will require some interventional procedures within their first year as their condition will be deemed critical .Over 75% of infants born with critical heart disease can survive beyond the first year of life and many can lead near normal lives thereafter. Unfortunately majority of children born in developing countries with congenital heart disease do not receive care which has led to high mortality and morbidity among them. Leading to high morbidity and mortality, at least 15 types of cardiovascular defects are recognized, with many additional anatomic variations.

- Thousands of babies are born each year with cardiovascular defects. Of these,

The epidemiological survey in United States revealed the following:

Congenital heart defect	**Incidence**
Atrioventricular septal defect	4-10%
Coarctation of the aorta	8-11%
Tetralogy of fallot	9-14%
Transposition of the great arteries	10-11%
Ventricular septal defects	14-16%
Hypoplastic left heart syndrome	4-8%

- About 650,000 to 1,300,000 people in the United States with cardiovascular defects are alive today.
- Infant death rates (under 1 year) are 36.5 per 100,000 white infants and 52.5 per 100,000 black infants.
- From 1996 to 2006 death rates for congenital cardiovascular defects have declined from 33.3 percent to 26.7 percent.

In Tamil Nadu alone, nearly 30,000 children are born with congenital heart defect every year, with an almost equal incidence in urban and rural areas. With advances in palliative and corrective surgery in the past 20 years, many more children are now able to survive into adulthood (Fulton &Freed, 2004).

As many as 70% to 85% of children with congenital heart disease grow to be adults. Yet many have problems related to education, insurance, and employment. Hypothermia and cardiopulmonary bypass required during cardiac surgery for congenital heart disease may have a long term impact on the child's cognitive ability and academic function (Griffin, et al., 2003).

In pursuance to the 4-pronged strategy adopted by the ministry and in light of the recommendation of the Advisory committee on Media, the information education and communication (IEC) activities have been substantially enhanced during 2001-2002 particularly through print, radio and television. The Information Education and communication (IEC) efforts aim at creating awareness and disseminating information on the program of the Ministry primarily to the forget groups in rural areas, to the opinion makers and also to the public at large.

The information Education and communication Division of the Ministry has been entrusting with the responsibility of formulating appropriate Information Education and communication and has started in tune with the communication needs to the various programs. The Information Education and communication activities are to be undertaken through the available modes of communication in order to inform the people with messages and detail.

SIGNIFICANCE AND NEED FOR THE STUDY

Many problems that occur in the neonatal period require care over weeks, months or years. One or several anomalies may result from maldevelopment of the heart or great blood vessels leading to and from the heart, producing congenital heart disease.

Linda S. Franck, et al., (2010), equates regarding pre and post operative parental stress and to examine some of the influencing factors during the postoperative period for children undergoing elective cardiac surgery among parents of 211 children in postoperative wards and method incorporated was experimental and the result postulated by him were identification of parents at risk for high stress and specific interventions to improve parental support and coping are needed.

Lan SF, et al., (2007), reported a study to investigate the essence of the experience of mothers during the decision making process, when facing their child undergoing heart surgery with 9 mothers in Taiwan. He adopted the phenomenological study and found that the caregivers and their families experience psychological distress, role reorganization and remodeling of family functioning.

Jennifer Stinson, et al., (2006), conducted a study to examine the information needs of mothers whose infants had cardiac surgery with 30 mothers by using mothers' information needs instruments (MINI I and II) and completed the comfort/readiness scale. The result postulated by him that mothers' understanding scores and their care giving comfort levels were significantly higher post-discharge. The results support the use of standardized teaching and community follow up for mothers charged with caring for infants who are recuperating from cardiac surgery at home.

Rachel L. Knowles et al., (2006), stated in this comparative study aimed to investigate the health professionals place similar values on the quality of life outcomes of children with congenital heart disease.. 109 pediatric cardiology professionals (72% female, media age 38 years) and 106 parents (82% female, median age 37 years)of children with congenital heart defects were selected and found that improving our understanding of the relative importance of different outcomes to children and families is an important basis for sharing decisions about clinical care. The view of young people

with congenital heart defects should be an important focus for future enquiry into health outcomes.

Pinto RP, et al., (2002), indicated that to prepare children psychologically for surgery by using video tape modeling. 60 preoperative children participated in this two viewing study and found that the patients undergoing preparation using the videotape model exhibited less arousal than , less self- reported anxiety, and less behaviorally rated anxiety when compared to patients who did not view the videotape preparation.

Pinalli, (1981), narrated that identifying mothers perceptions on importance of caring their children and their level of understanding of basic care needs, pre selected information items related to caring for infants receiving from cardiac surgery. He interviewed 10 mothers of infant with congenital heart defects. Concerns increases from the first to the second interview such as feeding, nutrition, weight gain, surgery, normal infant care, medications, crying and understanding of the disease. He postulated that a formal teaching program based on these concerns would raise the mothers' confidence.

Nurses Interact with family more consistently than any other member of the health care team, they have the opportunity to offer support and information in addressing these complex issues. Discharge is another critical time in the life of the mothers of infant diagnosed with congenital heart defects, nurses can help prepare mothers for this exciting, yet tremendously stressful time, by encouraging them to participate in their child's care throughout hospitalization. Mothers can be provided with the written or videotaped information concerning their child care and diagnosis and be given and ample opportunity to ask question reviewing this material

Caring of a child while in the hospital will be mothers gain confidence in their ability to care with a chronic illness at home. Finally more detailed information is provided about congenital heart problems, surgical correction, prognosis, child care, medications and symptom management perhaps in the born of a video (or) booklet. Parent's involvement, integration and education are important in promoting the recovery and well being of affected child.

Information education Communication (IEC) combines strategies, approaches and methods that enable individuals, families, groups, organizations and communities to play active roles in achieving, protecting and sustaining their own health.. Embodied in IEC is the process of learning that empowers people to make decisions, modify behaviors and change social conditions. Activities are developed based upon need assessments, sound educational principles and periodic evaluation using a clear set of goals and objectives.

Creating awareness about the programmers, ensuring transparency in the implementation, encouraging people's participation in the development process and promoting the concept of social audit for ensuring accountability. All the four elements of the above strategy are complementary to each other and appropriate information education and communication (IEC) activities are an essential part of actualizing this strategy.

Information education Communication plays a pivotal role in creating awareness, mobilizing people and making development participator through awareness and by transferring knowledge, skills during clinical experience in pediatric ward, the investigator observed that mothers were not aware about management of a child with the congenital cardiac surgery.

The review of literature and practical experience motivated the researcher to help and equip the mothers with knowledge and practice to promote speedy recovery during post operative period of the child and ensure survival. So the investigator was interested to conduct it as a research study.

TITLE

Effectiveness of Information Education Communication package on Home care management subjected to cardiothoracic surgery among mothers of children.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of Information Education communication package on home care management subjected to cardiothoracic surgery among mothers of children in selected hospital, Chennai, 2010 – 2011.

OBJECTIVES

1. To assess the pre test level of knowledge on home care management subjected to cardiothoracic surgery among mothers of children.
2. To assess the post test level of knowledge on home care management subjected to cardiothoracic surgery among mothers of children after Information Education Communication.
3. To compare the effectiveness of information education communication between pretest and post test level of knowledge among mothers of children.
4. To associate the post test level of knowledge on home care subjected to cardiothoracic surgery among mothers of children with their demographic variable.

NULL HYPOTHESIS

H_{01}: There is no significant difference in the level of knowledge on home care management subjected to cardiothoracic surgery who received information education communication.

VARIABLES

Dependent Variable

Home care management subjected to cardio thoracic surgery.

Independent Variable

Information Education Communication package.

OPERATIONAL DEFINITION

Effectiveness

Refers to Information Education Communication package intended to achieve of gain in knowledge by mothers on home care subjected to cardiothoracic surgery.

Knowledge

Refers to evaluate the ability of mothers to respond to questions on Home care management subjected to cardiothoracic surgery

Information Education Communication

Information

Refers to giving information about home care management subjected to cardiothoracic surgery among mothers of children by pamphlets.

Education and Communication

Refers to teaching about home care management subjected to cardiothoracic surgery among mothers of children by video clips.

Home care Management

Refers to care which is given after discharge by mothers such as, general activities, administering medications, Incision site care and follow up care.

Mothers

Refers to an individual aged between 20-40 years whose child had undergone cardiothoracic surgery.

Children

Refers to individual aged between 0-12 years who had undergone cardiothoracic surgery.

ASSUMPTION

1. Mothers may not have adequate knowledge about home care management
2. Mothers may gain knowledge after information education communication package on home care management subjected to cardiothoracic surgery.

DELIMITATIONS

1. The study was delimited to a period of 4 weeks of data collection.
2. The study was delimited to selected setting.

PROJECTED OUTCOME

1. The study will enable the mothers to improve their knowledge in home care management subjected to cardio thoracic surgery.
2. Application of study findings will help the mothers to improve their child's health.

SUMMARY

This chapter deals with the background of the study, significance and the need for the study, title and statement of the problem, objectives, variables, assumptions, research hypothesis, operational definitions, delimitations of the study, and projected outcome.

ORGANIZATION OF THE REPORT

Following chapter contains

Chapter II : Review of literature and conceptual framework

Chapter III : Methodology

Chapter IV : Data analysis and interpretation

Chapter V : Discussion

Chapter VI : Summary, recommendations and limitation.

This is followed by references and appendices.

CHAPTER – II

REVIEW OF LITERATURE

The literature review is based on an extensive survey of journals, books and international nursing journals. A review of literature relevant to the study was undertaken which helps the investigator to develop deep insight into the problem and gain information on what has been done in the past.

An extensive review of literature was done by investigator to lay a broad foundation for the study and conceptual framework to proceed with the study under the following headings.

For the purpose of logical sequence the chapter is divided into two parts.

Part-I

a. General information related to Cardiac Surgery

b. Literature related to Home care management

c. Literature related to parental concerns for cardiac surgery

d. Literature related to Information Education Communication

Part- II Conceptual framework

Part-I

a. General information related to Cardiac Surgery

Definition:

Heart surgery in children is done to repair heart defects a child is born with congenital defects and heart diseases a child gets after birth that needed surgery.

Types of cardiac surgery:

There are two basic types of cardiac surgery performed in children

1. closed heart surgery
2. open heart surgery

Closed heart surgery:

Closed heart surgery usually involving works on structures outside the heart(such as arteries) . Sometimes it will completely repair the heart problem or only fix the heart

problem until the child is old enough and strong enough to have the heart defect fixed more completely.

Examples of closed heart surgery include:

- Repair of coarctation of aorta.
- Placement of a pulmonary artery(PA) banding
- Blalock-taussig (BT)shunt

Open heart surgery:

It usually involves repairing or fixing structures located inside the heart. Open heart surgery involves placing the child on a heart-lung bypass machine or cardiopulmonary by-pass.

Examples of open heart surgeries include:

- Fixing a ventricular septal defect.
- The arterial switch operation
- The Norwood operation
- Valve replacements
- Repair of AV canal
- Repair of Tetralogy of fallot
- The Fontann procedure
- The Ross procedure

COMMON HEART SURGERIES IN CHILDREN:

Patent ductus arteriosus (PDA) ligation

Before birth, there is a natural vessel between the aorta and the pulmonary artery called the ductus arteriosus. This opening usually closes shortly after birth. A Patent ductus arteriosus occurs when this opening fails to close. Sometimes a simple surgery can be done. In this procedure, the surgeon inserts a few small tubes into an artery in the leg and passes them up to heart. Then a small metal coil or another device is put in to the child's arteriosus artery. The coil or other device blocks the blood flow, and this corrects the problem. Another method is to make a small incision on the left side of the chest, reaches in and ties off the ductus arteriosus.

Coarctation of the aorta repair:

Coarctation of the aorta occurs when a part of the aorta has a very narrow section. To repair this defect, an incision is usually made on the left side of the chest, between the ribs. There are four ways to correct such as patch closure, stitching, using subclavian flap and the fourth way is to connect a tube to the normal sections of the aorta, on either side of the narrow section.

Atrial septal defect repair:

The atrial septum is the wall between the left and right atria of the heart. There is a natural opening before birth that usually closes on its own when a baby is born. When the flap does not close, the child has an atrial septal defect. Atrial septal defect correction can be done by open heart surgery, 2 small umbrella – shaped "clamshell" devices are placed on the right and left sides of the septum. In open heart surgery, the septum can be closed using stitches, or sutures. Another way is to cover the septum with a patch made of membrane or a man-made material.

Ventricular septal defect repair:

The Ventricular septum is the wall between the left and right ventricles of the heart. A hole in the Ventricular septum is called a Ventricular septal defect. Sometimes this condition needs open-heart surgery and also require placing a man-made patch over the hole to cover it. Some defects can be closed using heart catheterization.

Tetralogy of fallot repair:

Tetralogy of fallot is a congenital heart defect that usually includes 4 defects in the heart. The corrections for this condition such as

- Ventricular septal defect repair
- Pulmonary stenosis correction and patch placement
- Shunting between the right ventricle and main pulmonary artery

Transposition of the great vessels repair:

In a normal heart, the aorta comes from the left side of the heart, and the pulmonary artery comes from the right side. Transposition of the great arteries comes from the opposite sides of the heart. The common repair is an arterial switch. The aorta and

pulmonary artery are divided. The pulmonary artery is connected to the right ventricle, where it belongs. Then, the aorta and coronary arteries are connected to the left ventricle, where they belong.

Truncus arteriosus repair:

Truncus arteriosus is a rare condition that occurs when the aorta, coronary arteries, and the pulmonary artery all came out of one common trunk. The pulmonary arteries are separated from the aortic trunk, and any defects are patched. A connection between the right ventricle and the pulmonary arteries.

Tricuspid atresia repair:

The tricuspid valve is the valve between the upper and lower chambers on the right side of the heart. Tricuspid atresia occurs when this valve is mission. A series of shunts and surgeries may be necessary to correct this defect.

Total anomalous pulmonary venous return (TAPVR) correction

Total anomalous pulmonary venous return occurs when the pulmonary veins bring oxygen rich blood from the lungs back to the right side of the heart, where it should be.

Total anomalous pulmonary venous return repair includes the pulmonary veins are attached to the left side of the heart, where they belong, and any abnormal connections are closed.

Hypoplastic left heart repair:

Hypoplastic left heart syndrome results from a severely underdeveloped left heart. A series of 3 heart operations is usually needed. The first operation is where one blood vessel is formed from the pulmonary artery and the aorta. The second operation is usually done when the baby is 4 to 6 months old. The third operation is done a year after the second operation. A heart transplant may be done to treat this condition.

COMPLICATIONS:

- Inadequate perfusion of organs or tissues
- Stroke or seizures
- Embolization

- Bleeding
- Hypothermia
- Arrhythmias
- Breathing difficulties
- Sepsis
- Pneumonia

PROGNOSIS:

The outcome of heart surgery depends on the child's condition, the type of defect, and the type of surgery that was done. Many children recover completely and lead normal, active lives.

HOME CARE:

General activities:

- Child will need at least 3 or 4 more weeks at home to recover. For larger surgeries, recovery may take 6 to 8 weeks. Talk to child's doctor about when your child can return to school, day care, or participate in sports.
- Pain after surgery is normal. There may be more pain after closed- heart surgery, compared to open heart surgery. Usually, the pain is minimal after the second day and is easily managed with acetaminophen.
- When lifting your child, support both their head and bottom for the first 4 to 6 weeks.
- School or day care: most often, the first few weeks after surgery should be a time to rest. After the first follow up visit, the doctor will tell you what the child can do.
- Sports: child should not do any activity where there is a chance they could fall or take a blow to the chest. Child also should avoid bicycle or skateboard riding, roller skating, and all contact sports. Child may climb stairs and swimming.

Diet:

- Child's diet to make sure they get enough calories to heal and grow. Most babies and infants can take as much formula or breast milk as they want. Toddler and older children should be given a regular, healthy diet. The doctor or nurse will tell you how to improve the child's diet after surgery.

Wound care:

- Wash all the incisions, once a day with soap and water. Pat them dry. Look at the wound for signs of infection, which are redness, swelling and drainage.
- Child should take only a shower or sponge bath. Their dressings should not soak in the water. It is to remove them when they start to peel off.
- Make sure that the incision site is covered with clothing or a bandage when your child is in the sun.

Follow-up care:

- Ask doctor or nurse before getting any immunizations for 2 to 3 months after surgery.
- Children who have had heart surgery must take antibiotics before, and sometimes after, having any dental work. It is very important to have child's teeth cleaned regularly.
- Child may need to take medicine when they are sent home. Be sure to follow the correct dosage.
- Follow up with doctor 1 to 2 weeks after discharge from hospital.

When to call the doctor:

- Fever, nausea or vomiting
- Chest pain or other pain.
- Redness, swelling, or drainage from the wound.
- Difficulty breathing or shortness of breath.
- Puffy eyes or face.
- Fatigue
- Bluish or grayish skin.
- Dizziness, fainting or heart palpitations.
- Feeding problems or reduced appetite.

b. Literature related to Home care management

Selda Polat, et al., (2007), conducted a study to evaluate the physical growth parameters and neurodevelopment. He selected 76 patients with congenital heart disease and 51 healthy children aged 1-72 months applied to Mersin University Hospital.

He found the results concluded that the importance of growth parameters, more detailed examinations such as body mass index, mid arm circumference, triceps skin fold thickness, and developmental screening tests appear useful in identifying children with congenital heart disease who are under risk for delayed growth and development.

Brain MC Alvin, et al., (2007), conducted the present study to examine the relationship of routine immunizations with adverse events. He selected 137 patients with single ventricle physiology from the newborn nursery. He found that no sudden death events covered within 48 hours of immunization. No association could be identified between routine immunizations and adverse events in infants with single ventricle physiology.

Laura Bell et al., (2006) stated that the study to assess the importance of immunizations in children with heart disease. She selected 120 children and found the results of that it is best to avoid all the immunizations the week before and for 4-6 weeks after heart surgery.

Herbert Deppe (2006), reported that the study to evaluate the long-term need for dental treatment following non-radical treatment modes prior to cardiac valve surgery. He selected a total of 305 patients and adopted a evaluative method and found that nonradical treatment modes prior to cardiac valve replacement can only be successful over the long term if adequate postoperative dental care is provided.

Susan Rgortner, et al.,(2006), stated that the study to assess the self efficacy expectations among 149 cardiac surgery patients. He adopted the experimental method and found that the functional class at 4 and 8 weeks was an independent predictor of self reported activity at 12 weeks, as was 8 week functional class for self reported activity at 24 weeks.

Annete Majnemer, et al., (2006), conducted this prospective study to determine the long-term health - related quality of life of children with congenital cardiac malformations following open heart surgery, and to describe the persisting level of stress in their families. He selected 49 parents completed the child health questionnaire, the parenting stress

index and he found that strategies need to be considered to enhance family well being in the planning and delivery of health services to this population at high risk.

Dana L. Boctor, (2005) narrated that a study to assess the nutritional need in the post operative period in infants receiving from cardiac surgery can impact morbidity and growth. he selected 27 infants and found that weight gain after cardiac surgery in infants is suboptimal and is related to feeding practices greater attention to achieving energy requirements during postoperative recovery is necessary, especially in breast fed infants.

Andrew S. Mackie et al., (2004), conducted a study to assess the factors predisposing infants to unplanned hospital readmission after congenital heart surgery. He selected 542 children underwent arterial switch operation and Norwood procedure. He adopted the case control study and found that the residual hemodynamic problems predispose to hospital readmission after the arterial switch operation and Norwood procedure. Low socioeconomic status may reduce the likelihood of readmission eve problems arise.

Catherine Limperopoulous, et al., (2001), reported that the study to determine the functional limitations and burden of care of young children with congenital heart defect after open heart surgery. He selected one hundred thirty-one eligible infants and found that factors enhancing risk for functional disabilities included preoperative neurodevelopment status, microcephaly, length of deep hypothermic circulatory arrest, length of stay in the intensive care unit, age at surgery and maternal education. The high prevalence of functional limitations and dependence in activities of daily living is currently underappreciated in the clinical setting, and deserves additional attention by pediatricians and developmental specialists.

I.M. Mitchell, et al., (1995), conducted a study to assess the nutritional status of Children with congenital heart defect. He selected 48 children and found that Children with congenital heart defect are frequently undernourished, irrespective of the nature of cardiac defect and the presence or absence of cyanosis.

Wray .J, et al., (1994) Conducted this retrospective cross sectional study with the aim to assess the psychological impact of cardiac and cardiopulmonary transplantation on

children with 65 children who had been given heart or heart lung transplants and two reference groups of 52 children who had other types of cardiac surgery and 45 healthy children. He found that developmental and cognitive measures indicated that children given transplants had significantly lower scores on severe parameters, particularly interns of development may be within the normal range, and there are adverse psychological effects associated with cardiac and cardiopulmonary transplantation. Interventions should be developed that are tailored to the particular needs of this very specialized group of pediatric patients and their families.

Fiser, et al., (1991) Conducted a co relational study to assess the nutritional status and also for the saturation of child with seven infants with congenital heart defects of seven infants were selected and the results was postulated that bottle feeding is frequently recommended for infants with congenital heart defects, because it is thought that it is less strenuous than breast feeding and that the infants' intake can be more accurately measured.

Kramer HH, et al., (1989), conducted a comparative study to assess the development of personality and intelligence with 138 children with congenital heart defects and 89 healthy controls. He found that these cardiac patients showed an increased Fueling of inferiority and of basic anxiety and more impetuous behavior as their way of self-protection, but reduced need for independence due to parental overprotection was not confirmed.

Hoffman JI, (1955), conducted this prospective study to assess the development and behavior of children. He selected 49 parents when their child was 15 yrs age and used a child Behavior Check list as part of developmental follow-up protocol. He found that the internalizing and externalizing behaviors of the child were significantly correlated with psychosocial well being, with ranging from - 0.32 to - 0.52, and P less than 0.05.

c. Parental concerns of cardiac surgery:

Parkman, et al.,(2005) from Seattle University conducted this study to describe a population of infants undergoing cardiac surgery at a regional tertiary medical center and the relationship between age weight, number of other diagnoses and length of stay in the hospital and presence of complications. Nearly two third of the infants in the sample were

younger than twenty eight days with a model weight of 3.2 kg. Fifty percent of infants led one primary defect and were discharged in 4 to 15 days after surgery. As the number of other diagnoses increased by one, the odds at complications decreased by 0.63%. The findings from this study can be used as evidence support care that nurses give to neonates and infants undergoing cardiac surgery.

Ismee A. Williams et al., (2004) Conducted this descriptive study aimed to evaluate the impact prenatal diagnosis on parental understanding of congenital heart disease in newborns, selection of questions about the cardiac lesion, surgical repair, follow up management, risk for congenital heart disease in future children and material education before neonatal Intensive care unit discharge. He selected 50 families and found that prenatal diagnosis increases parental understanding of prenatal congenital heart disease. Nevertheless, Parental understanding remains suboptimal.

Ianyhl et al., (2004), conducted the study to assess the necessity of surgical treatment for congenital heart disease may develop lack of confidence in their ability to care for their infant. A quasi - experimental design was adopted for the study, subjects were selected by purposive sampling who had a hospitalized infant with congenital heart disease. There were 20 mothers in the control group and 15 mothers in the interventional group. Evaluations of these 2 groups based confidence to provide adequate care were conducted twice, at one week and one month after the infant's discharge from the hospital. The intervention group had better confidence than the control group at one week and one month after the infant's discharge ($p<0.05$).

Rampel GR, et al.,(2004), conducted the descriptive study were 34 interviewers were analyzed for common themes and distinguishing characteristics of antenatal decision making and further testing and continuation of the pregnancy as their first parenting decisions. He found that through skilled counseling the cardiologist in addition to his diagnostic and management skills, may meaningfully inference the ongoing care of the infant

Cheuk DKL, et al., (2003) conducted a cross sectional questionnaire survey to assess the awareness of parents on congenital heart disease. He selected 156 parents of children with relatively simple congenital heart disease were recruited from the outpatient

clinic of a tertiary cardiac centre over a 3 month period. The result suggest that the current educational program is inadequate and needs to be retired to promote better parental understanding of their child's heart disease, with the ultimate aim of enabling parents to impart such knowledge accurately to their children.

Westman I, et al., (1997), an experimental study was designed to help parents cope with the implications of the diagnosis of congenital heart disease with 46 parents and the result was incorporated that the Intervention strategies involving classification of medical information, discussion of psychological issues, and a combination of two were the diagnosis and other medical information. Regardless of the intervention strategy used satisfaction was generally high and parent anxiety did not appear to fluctuate during the course of the visit.

Lailelmahedi, et al., (1996) conducted a survey with 100 children to assess the Parental understanding of chronic illness associated with improved compliance with medical care with congenital heart disease aged 6 months to 15 years and their parents. The result was incorporated that 30% of the parents correctly named their children's congenital heart disease and 21% correctly indicated the heart leision on a heart diagram. Only 27% of all parents had heard of infective endocarditis. A score for parent's knowledge showed that 36% had good knowledge, while poor knowledge was found in 64% of the parents.

Savarsdottir et al.,(1996), conducted a study to examine the relationship between care giving demands, family system demands, and parental coping behavior in seventy one families who had an infant one year of age or younger diagnosed with a congenital heart defect and adopted the correlation study and found that Mothers spent the most care giving time attending to their infants' physical needs, and fathers spent the most time attending to infants' emotional and developmental needs. Unexpectedly, no significant relationship were found between family system demands, infant care giving demands and mother coping strategies, parents of later - born infants with a congenital heart defect experienced higher levels of family system demands than did first - time parents.

d. Literature related to Information Education Communication

Brian A Mc Crossan et al.,(2008), narrated that the study to assess the feasibility of using broadband transmission instead of ISDN lines on home support for children with congenital heart defect. He selected five patients and 78 videoconferences were conducted and found that home support for infants or children with complex congenital heart disease can be provided successfully by video consultants utilizing home broadband links.

Catherine M Ikembha et al., (2001), conducted a cross - sectional study was performed to document the prevalence of internet access and usage patterns among families who have children with congenital heart diseases presenting for cardiac surgery. He selected 275 questionnaires and found that families are utilizing the internet to educate themselves about congenital heart disease. Most parents consider the process easy and the information obtained helpful to the understanding of their child's congenital heart defect and surgery.

Robert S. Greenberg et al., (2000) conducted a study on evaluate the impact of an educational videotape on parental responses to a questionnaire about pediatric pain management. He selected 50 Parents of children scheduled for inpatient, post operative hospital care. He found that all parents who viewed the videotape stated that it was informative regarding their understanding of their child's plain management. This effective and efficient teaching medium may be useful in improving pain management in past operative pediatric surgical patients.

Campbell, et al., (1994) narrated a study to compare 2 methods of preparing children (ages 4 to 12 years) for heart surgery between post discharge adjustments in children who received coping-skills training than in children who received information only. He selected 130 Children and found that who had received coping-skills training showed less behavioral distress during hospitalization and, after discharge, better school performance and earlier improvement in functional health status. Parents also expressed greater confidence in the care-giving role both during hospitalization and after discharge.

PART – II

CONCEPTUAL FRAMEWORK

The conceptual framework and model adopted for the present study is based on the Callista Roy's model focuses on the concept of adaptation of a person. The theorist concept of nursing person, health and environment are all interpreted to thus central concept.

Roy's model and four concepts of the nursing paradigms

A.PERSON

1. Is the recipient of nursing care; Roy implies that a client has an active role in the care.
2. Is a biopsychological being that constantly interacts with a changing environment.
    a. Is an adaptive system that uses innate and acquired coping mechanism to deal with stressors.
    b. can be an individual, family, group, community or society.

B. ENVIRONMENT

1. Is defined by Roy as all conditions, circumstances and influence surrounding and affecting the development and behavior of persons and groups.
2. Consists of internal and external environment, which provide input in the form of stimuli.
3. Is always changing and constantly interacting with the person.

C.HEALTH

1. Was originally described by Roy as a health-illness continuum, with one end of the continuum being death and the other end wellness; health and illness were considered an inevitable dimension of the person's life.
2. Is currently defined by Roy as a process of being and becoming an integrated and whole person; health viewed as the goal of the person's behavior and the person's ability to be an adaptive organism.

D. NURSING

1. Is required when a person expends more energy on coping, less energy available for achieving the goals of survival, growth, reproduction and mastery.
2. Uses the four adaptive modes to increases a person's adaptation level during health and illness.
3. Employs activities that promote adaptive, not ineffective, responses in situation of health and illness.
4. Is a practice centered discipline geared toward persons and their responses to stimuli and adaptation to the environment.
5. Includes assessment, diagnoses goal setting, intervention and evaluation.

The main concepts of this model are input, throughput and feedback.

INPUT

Input refers to stimuli which can come from the environment or from within a person. Stimuli classified as focal (immediately confronting the human system) contextual stimuli that are present or residual (non specific such as cultural belief or attitude about illness).

Input also includes person's adaptation level is constantly changing point made up of focal contextual and residual stimuli which represent the present standards of the range of stimuli, to which one can respond with ordinary adaptive response may be either on adaptive or ineffective response. Adaptive responses were those that promote integrity and help the person to achieve, the goals of adaptation. Ineffective responses are responses that fail to achieve or threaten the goals of adaptation.

In this study, the focal stimuli were considered as the identification of selected variables of mothers of children who had undergone cardiothoracic surgery such as age of child, sex of the child, age of mother, education of mother, occupation of mother, monthly income of family, type of marriage, previous experience. the contextual stimuli are all other stimuli present in the situation that investigator considered as assessment of information education communication package on home care management subjected to cardiothoracic surgery among mothers of children by using self assisted structured questionnaire were taken as input.

THROUGHPUT

Throughput makes a person's processes and effectors processes refer to the control mechanism that a person uses a adaptive system. Effector refers to the physiologic function, self concept, ad role function involved in adaptation. . In this study information education communication package such as video clippings and pamphlets on home care was given to the clients.

OUTPUT

Output is the outcome of the system when the system is a person output refers to the person's behavior.

In the Roy's system output is categorized as adaptive responses (those that promote a person's integrity) or ineffective responses (those that do not promote goal achievement).

In the present study it can be either adaptive responses that is that is gaining adequate knowledge or moderately adequate knowledge. On non adaptive response that is negative results of remaining in inadequate knowledge. The subjects are reassessed and must re institute the information education communication package on home care in same manner.

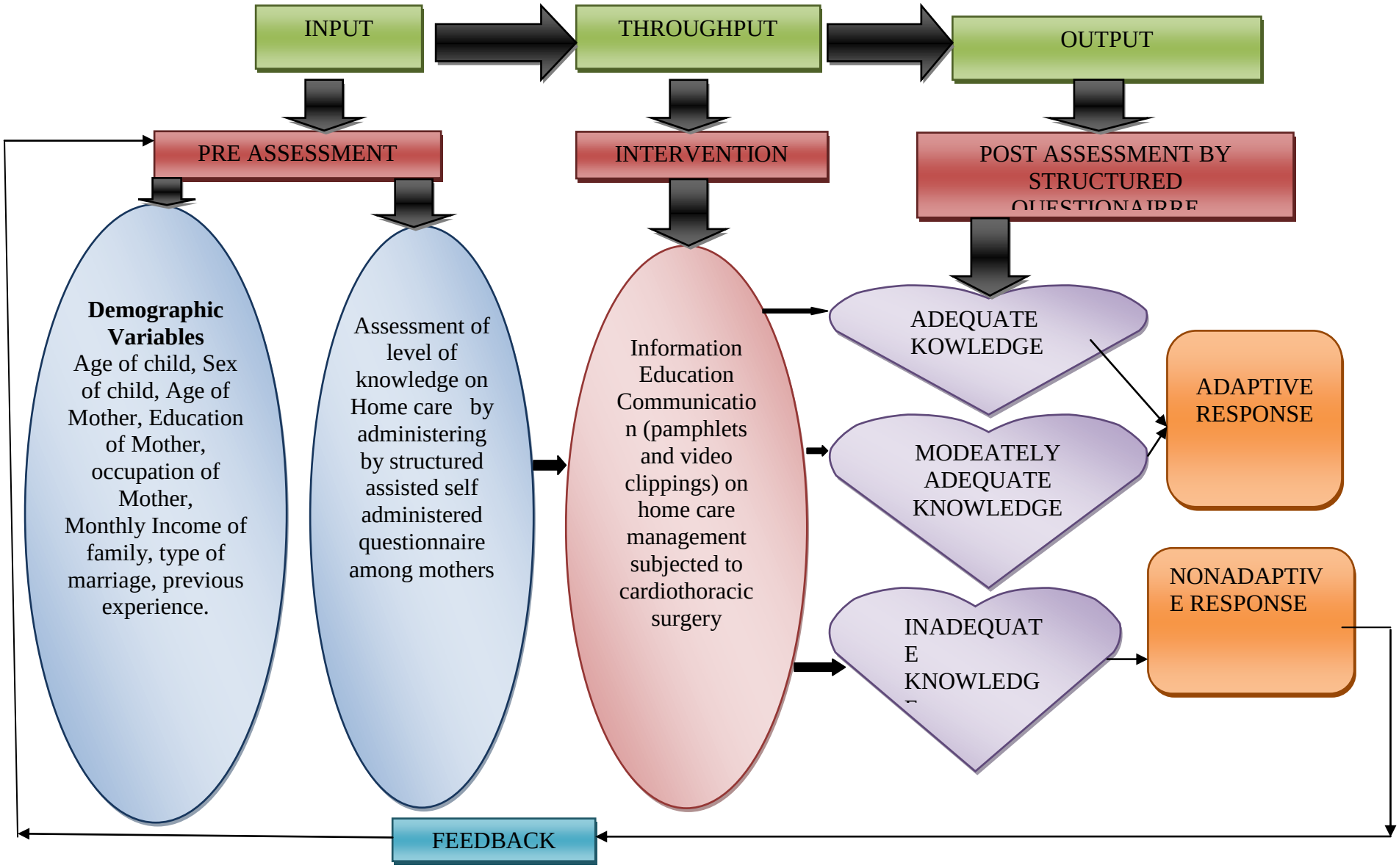

FIG.1: MODIFIED ROY'S ADAPTATION MODEL (1991)

CHAPTER – III

RESEARCH METHODOLOGY

Methodology is a systematic way to solve the research undertaken. Methodology for the study is defined as the way pertinent information is gathered in order to answer the research question or analyze the research problem.

This chapter describes the research methodology followed to evaluate the effectiveness of Information Education Communication Package on Home Care Management subjected to cardiothoracic surgery among mothers of children.

RESEARCH APPROACH

An evaluative approach was used to evaluate the effectiveness of Information Education Communication Package on Home Care Management subjected to cardiothoracic surgery among mothers of children

RESEARCH DESIGN

Selection of the design was based on purpose of study. The purpose of the study was to evaluate the effectiveness of Information Education Communication Package on Home Care Management subjected to cardiothoracic surgery among mothers of children. So **Pre experimental one group pretest posttest** research design was selected.

Group	Pre assessment(O_1)	Intervention(X)	Post assessment(O_2)
Experimental	O_1	IEC package	O_2

RESEARCH SETTING

The study was conducted at Frontier Lifeline Hospital, Mogappair, Chennai. This is a 120 bed tertiary cardiac center, away from 10kms of Vel R.S. Medical college-College of nursing, Avadi. Regularly 50 to 60 cardiac surgeries are doing per month. Child has to stay 8days in the hospital after surgery. At the time of discharge health care team members are explaining about child's condition and further follow up to their parents.

RESEARCH VARIABLES

Dependent Variable

Homecare management subjected to cardiothoracic surgery.

Independent Variable

Information Education communication package

POPULATION

Population refers to the entire set of individuals having same common characteristics and it is important to make distinction between target and accessible population.

Target Population

The target population of the study comprised of all mothers of children who had undergone cardiothoracic surgery.

Accessible Population

Accessible population of the study comprised of the mothers of children who had undergone cardiothoracic surgery and who fulfills inclusion criteria in Frontier Lifeline Hospital at Mogappair, Chennai.

SAMPLE

Sample of the study comprises of mothers of children who had undergone Cardiothoracic surgery and fulfills the inclusion criteria in Frontier Lifeline Hospital, Mogappair, Chennai.

SAMPLE SIZE

The sample size consisted of 30 mothers of children who had undergone cardiothoracic surgery from Frontier Lifeline Hospital at Mogappair.

SAMPLING TECHNIQUE

Non-probability purposive sampling technique was used to assess the effectiveness of Information Education Communication Package on Home Care Management subjected to cardiothoracic surgery among mothers of children.

CRITERIA FOR SAMPLE SELECTION

Inclusion Criteria

1. Mothers of children who have undergone cardiothoracic surgery
2. Mothers who are able to read and understand Tamil\English.
3. Mothers who are at the age between 20- 40 years of age.

Exclusion Criteria:

1. Mothers who are not willing to participate
2. Care givers other than Mothers.

METHODS OF DEVELOPING TOOL

The tool was developed after extensive review of literature and discussion with experts as a tool to collect the data. Tool to measure the knowledge of mothers about home care management subjected to cardio thoracic surgery was constructed self administered questionnaire.

DESCRIPTION OF THE TOOL

The tool consists of the following

Part-a: Demographic variables such as age of child, sex of child, age of mother, education of mother, occupation of mother, monthly income of family, previous experience.

Part-b: Assisted self administered questionnaire for pre and post knowledge assessment was used in which each correct answer carry one mark. Number of Question-20. Total Score - 20.

SCORING PROCEDURE

Marks	Percentage	Level of knowledge
Less than 10	Less than 50%	Inadequate
10-15	50-75%	Moderate
More than15	Above 75%	Adequate

VALIDITY OF THE TOOL

Content of tool was validated by 4 child health nursing experts and one cardiologist. The expert suggestions were incorporated in the tool. Then the tool was finalized and used for the main study.

RELIABILITY OF TOOL

The reliability of tool to assess the effectiveness of Information Education Communication Package on Home Care Management subjected to cardiothoracic surgery among mothers of children who had undergone cardiothoracic surgery was established by test–retest method. It was done using spearman's rank correlation coefficient method. R=0.94.

The scores indicate high correlation. Hence the tool was found to be reliable to conduct the main study.

ETHICAL CONSIDERATIONS

It refers to a system of moral values that is concerned with the degree to which research procedure adhere to professional, legal and social obligation to the study participants.

The study was conducted after the approval of dissertation committee and formal consent from the Medical Superintendent, Frontier Lifeline Hospital, Mogappair. The researcher explained the procedure and got oral consent from the samples before interviewed. The study information's were kept confidential.

PILOT STUDY

Formal permission was obtained from the medical superintendent, frontier lifeline hospital; mogappair during 10.5.2010-16.5.2010.The investigator selected six samples that fulfilled inclusion criteria were selected by using non-probability purposive sampling technique. A brief introduction was given to the samples and pretest was conducted which revealed 60 percent had moderately adequate knowledge. Intervention on home care management subjected to cardiothoracic surgery was given. Post test was done after 3days

which revealed 78 percent had gained adequate knowledge and 13 percent had moderately adequate knowledge and 9 percent had inadequate knowledge. The result shows a significant difference between the pre and post level of Information Education Communication package on home care management subjected to cardiothoracic surgery among mothers of children. There were no practical difficulties met by the investigator and the tools were considered to be reliable and appropriate.

This trial run revealed the clarity, feasibility and practicability in all aspects to conduct the main study.

DATA COLLECTION PROCEDURE

The study was conducted from 15.5.2010 to 15.6.2010 in Frontier Lifeline Hospital at Mogappair, Chennai. A formal permission was obtained from medical superintendent of frontier lifeline hospital who fulfilled the inclusion criteria by using non-probability purposive sampling technique. Pre assessment was done for 30 samples by using assisted self-administered questionnaire. Intervention such as video clippings and pamphlets on home care management subjected to cardiothoracic surgery among mothers of children were given. After an interval of 5 days posttest was done.

Pre-test	Number of subjects	Intervention	Posttest
15.5.2010	3	Information Education Communication package such as video clippings and pamphlets on home care management subjected to cardio thoracic surgery among mothers of children.	Post test was conducted after 5 days interval of giving intervention.
16.5.2010	2		
17.5.2010	1		
18.5.2010	1		
19.5.2010	1		
20.5.2010	1		
23.5.2010	2		
25.5.2010	2		
26.5.2010	2		
27.5.2010	1		
28.5.2010	2		
29.5.2010	2		
30.5.2010	1		
1.6.2010	2		
4.6.2010	3		
6.6.2010	1		
9.6.2010	1		
13.6.2010	2		
Total	**30**		

DATA ANALYSIS PROCEDURE

Descriptive Statistics

1. Frequency and percentage distribution was used to describe the demographic variables.
2. Mean and standard deviation used to compute the level of knowledge of mothers.

Inferential Statistics

1. Paired‘t’ test was used to find the effectiveness of Information Education Communication package on home care management subjected to cardiothoracic surgery among mothers of children.
2. Chi-square test was used to find the association between the demographic variables with post test level of knowledge.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the data analysis and interpretation of data collected from 30 samples of mothers of children who had undergone cardiothoracic surgery.

Descriptive and Inferential statistics were used for the analysis of the data. According to the study objectives the interpretation has been tabulated and organized as follows:

ORGANIZATION OF DATA

Section A : Description of frequency and percentage distribution of demographic variables.

Section B : Assessment of Pretest and Posttest level of knowledge among mothers.

Section C : Assessment of Effectiveness of Information education communication package on home care management subjected to cardiothoracic surgery among mothers.

Section D : Association of post test level of knowledge with demographic variables among mothers.

SECTION A

Table 1: Frequency and percentage distributions of Demographic Variables

n=30

Demographic Variables	No.	%
Age of child		
0 - 3 yrs	13	43.33
3 - 6 yrs	6	20.00
6 - 9 yrs	4	13.33
9 - 12 yrs	7	23.34
Sex of child		
Male	15	50.00
Female	15	50.00
Age of the mother		
20 - 25 yrs	5	16.67
25 - 30 yrs	8	26.66
30 - 35 yrs	12	40.00
35 - 40 yrs	5	16.67
Education of mother		
Illiterate	1	3.33
Schooling	9	30.00
Graduate	7	23.34
Post graduate	13	43.33
Occupation of mother		
Unemployed	8	26.66
Labour	2	6.67
Self employed	7	23.34
Private worker	8	26.66
Government worker	5	16.67
Religion		
Hindu	16	53.33
Muslim	9	30.00
Christian	5	16.67
Others	0	0.00
Monthly Income of the family		
Less than Rs.5000	3	10.00
Rs.5000 – 10000	2	6.67
Above Rs.10000	25	83.33
Type of marriage		
Consanguineous	11	36.67
Non-consanguineous	19	63.33
Do you have any previous experience?		
Yes	1	3.33
No	29	96.67

Table 1 shows the demographic characteristics of study samples.

Age of children between 0-3 years of age group was 13(43.33%), between 3-6 years were 6(20%), between 6-9 years were 4(13.33%), and 7(23.33%) were 9-12 years. Regarding their sex male 15(50%) and female 15(50%).

Considering age of mother between 30-35 years were 12(40%), 25-30 years were 8(26.67%), and both 20-25years and 35-40 years were 5(16.67%).

With respect to their education 13(43.33%) were postgraduates out of 30 mothers, 9(30%) were studied up to schooling, 7(23.33%) were graduates and only 1(3.33%) was illiterate.

Regarding their occupation 8(26.67%) were unemployed and equally were private workers 8(26.67%), 7(23.33%) were self employed, and 5(16.67%) were government workers.

With respect to their religion 16(53.33%) were Hindu, 9(30%) were Muslim and 5(16.67%) were Christian.

Regarding their family income 25(83.33%) were earning above Rs.10000, 3(10%) were getting less than Rs.5000 and 2(6.67%) were earning Rs.5000-10000.

Regarding type of marriage 19(60%) were non-consanguineous marriage, 11(40%) were undergone consanguineous marriage out of 30 mothers.

Considering their previous experience 1(3.33%) was previously experienced out of 30 mothers and 29(96.67%) were not experienced.

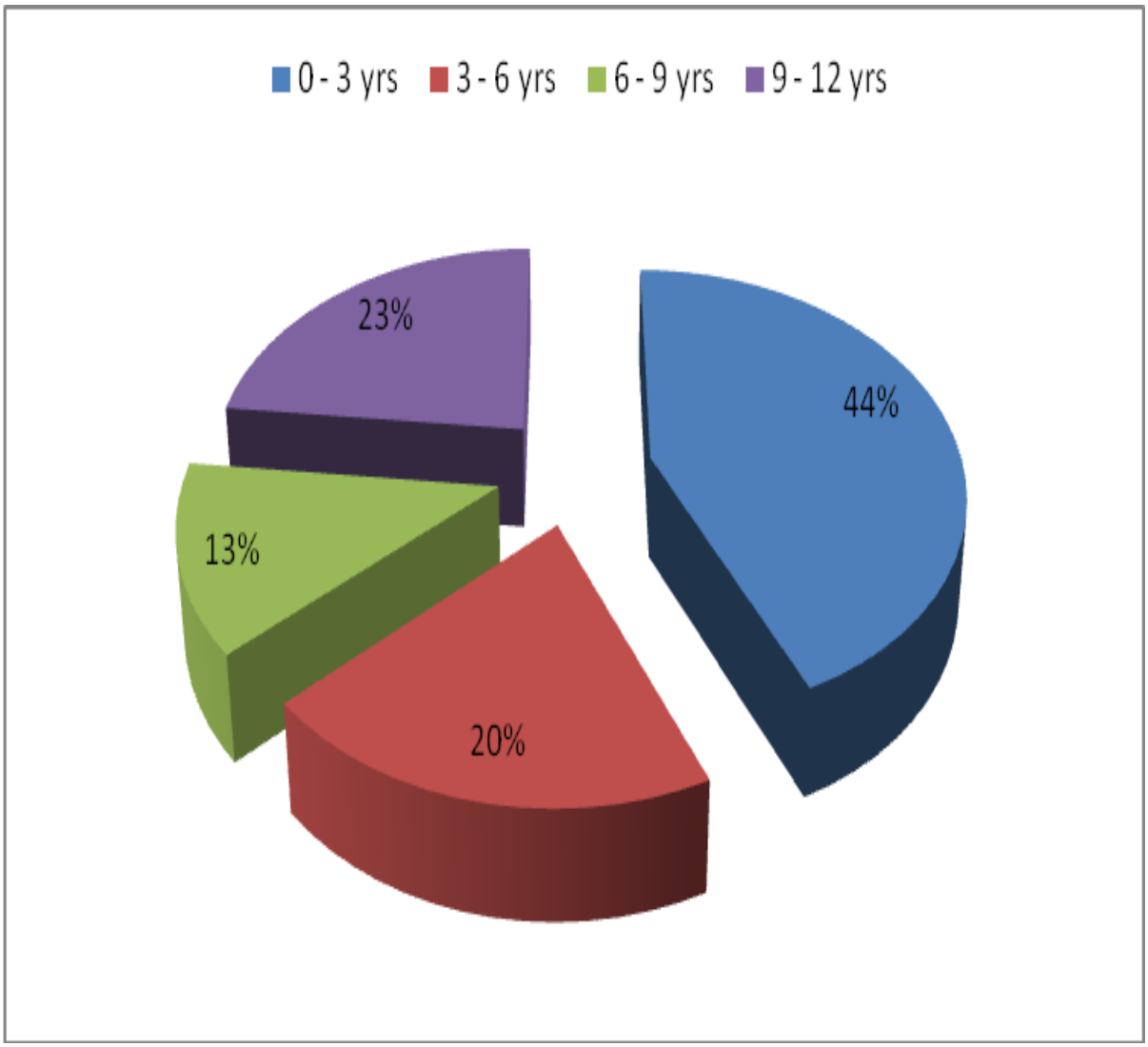

Figure 2: percentage distributions of age of children

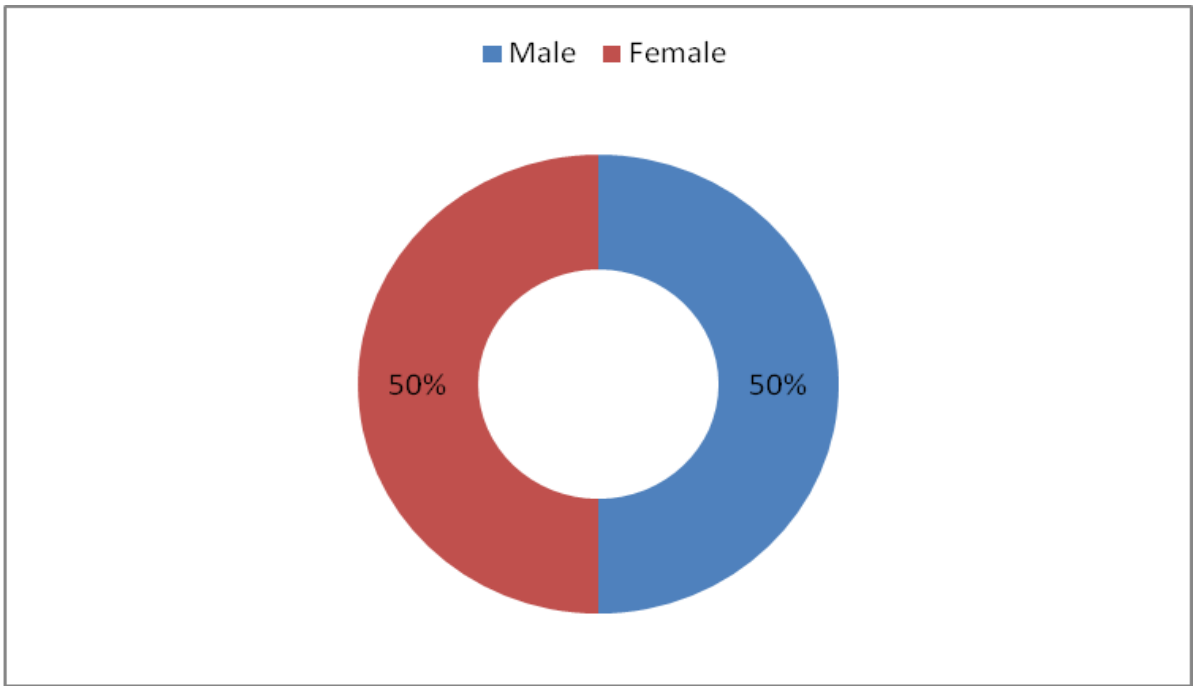

Figure 3: Percentage distributions of sex of children

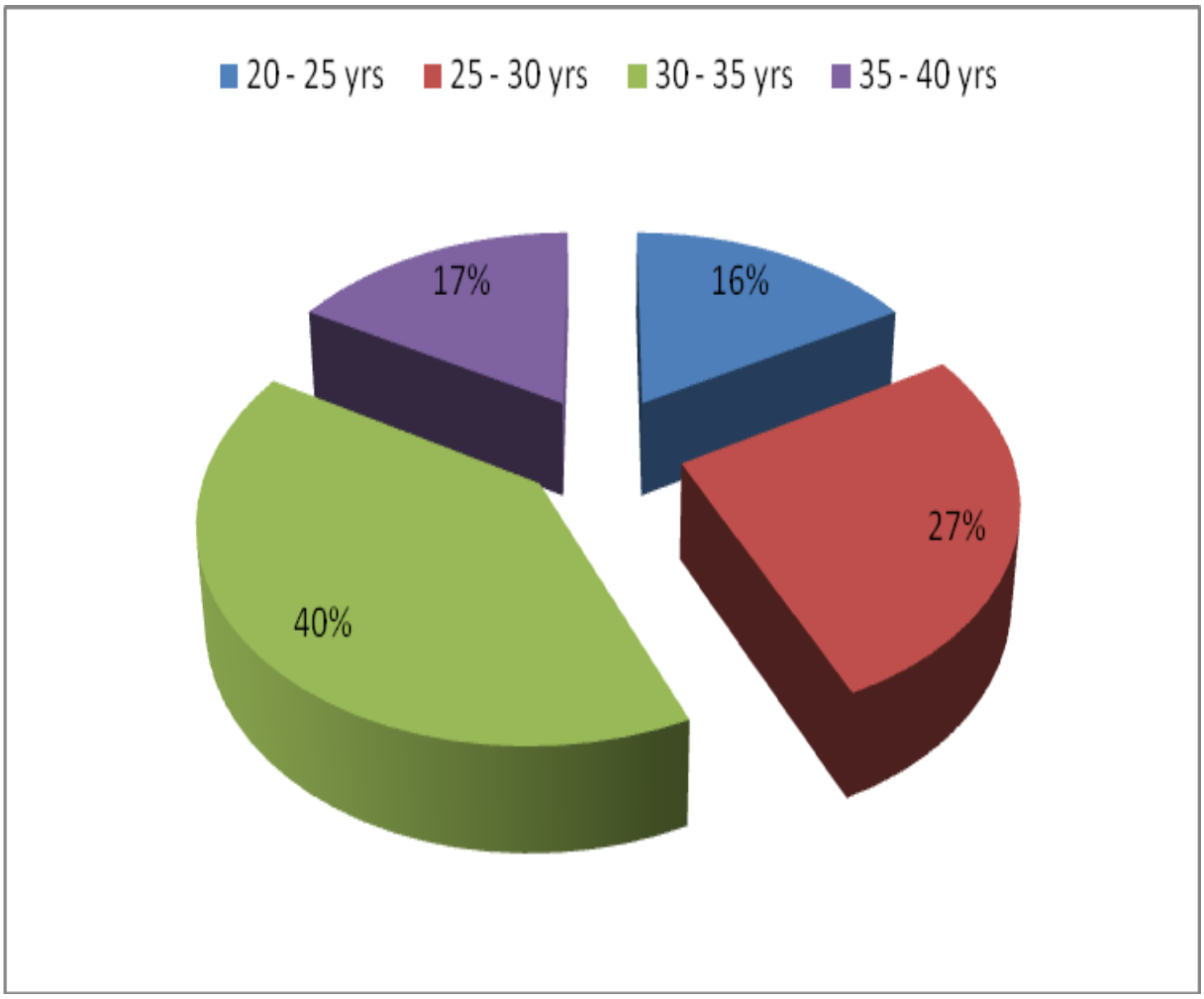

Figure 4: Percentage distributions of age of the mother

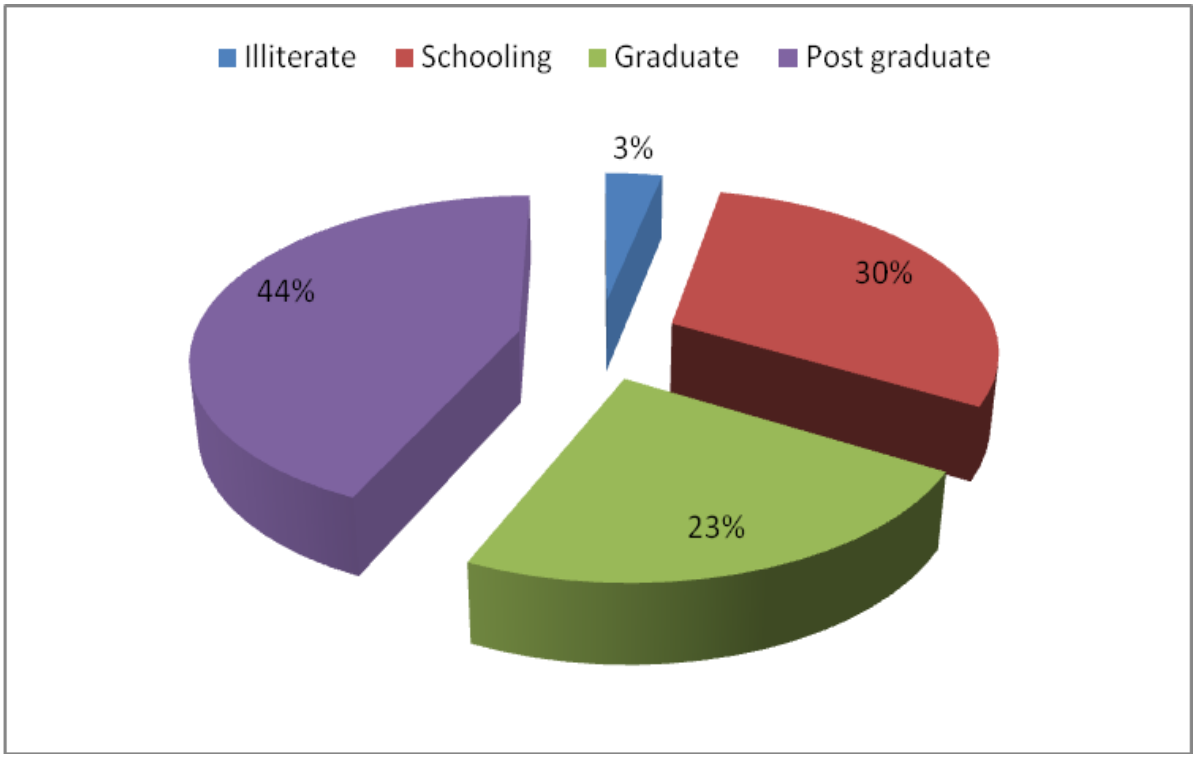

Figure 5: percentage distributions of education level of mother

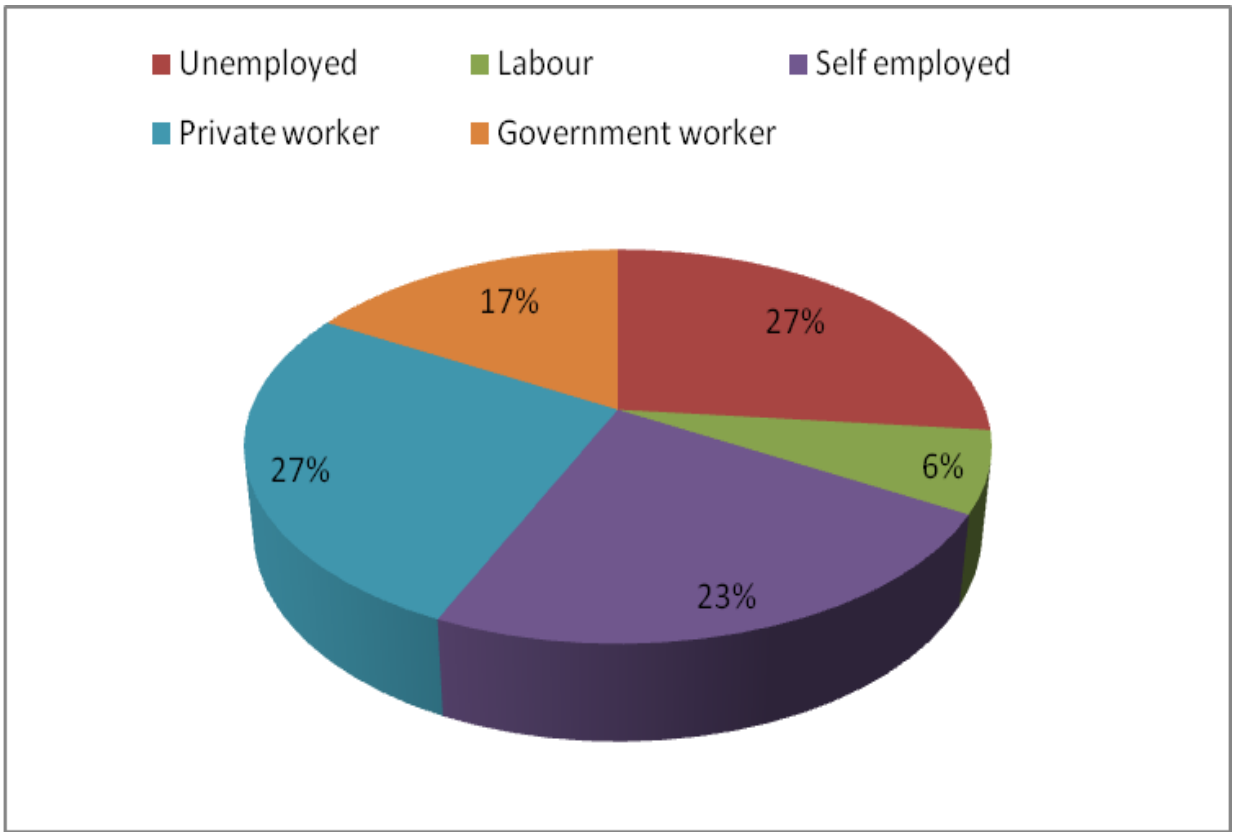

Figure 6: Percentage distributions of occupation of mother

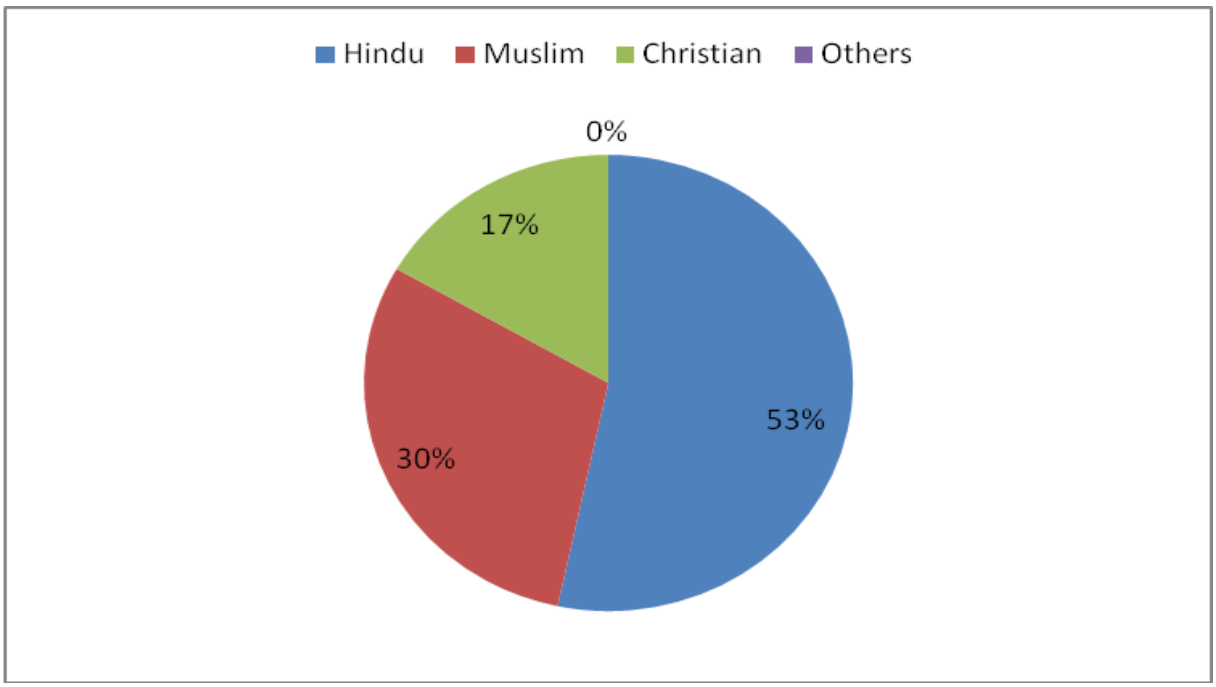

Figure 7: Percentage distributions of religion

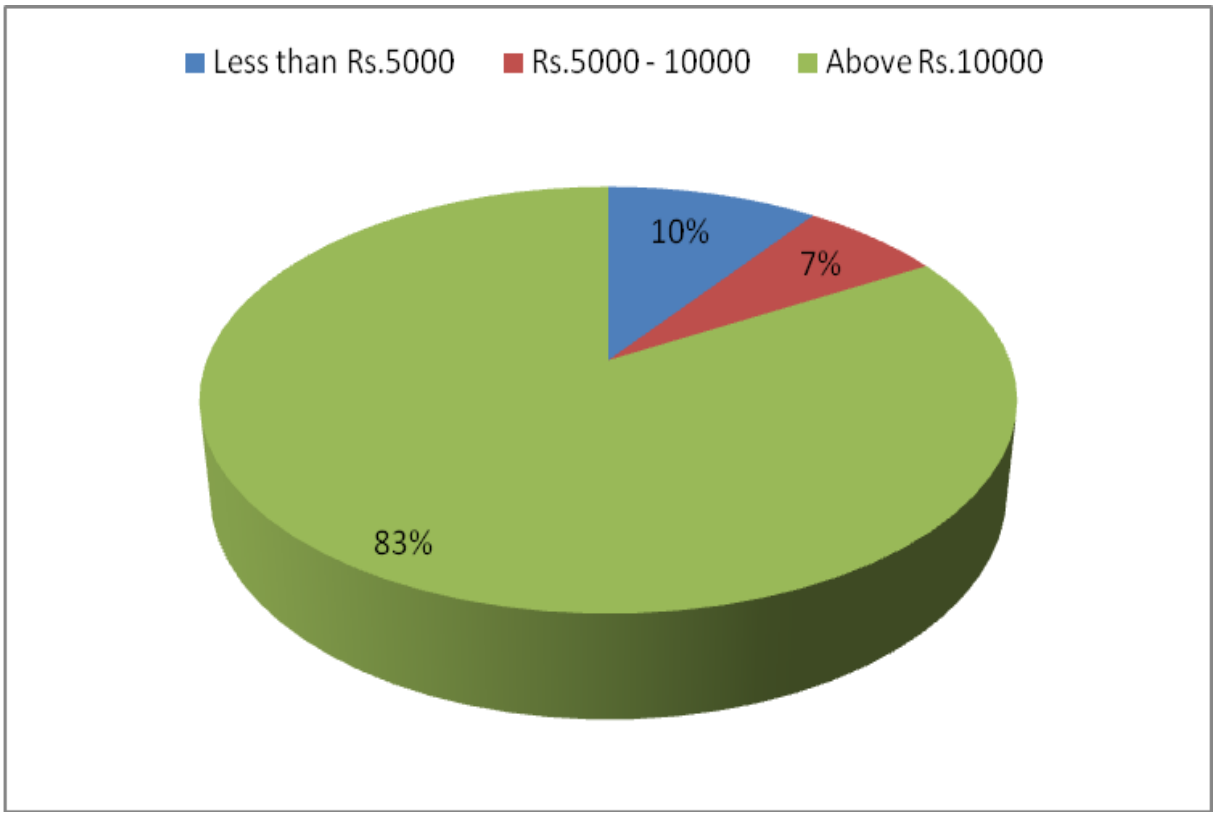

Figure 8: Percentage distributions of monthly income of family

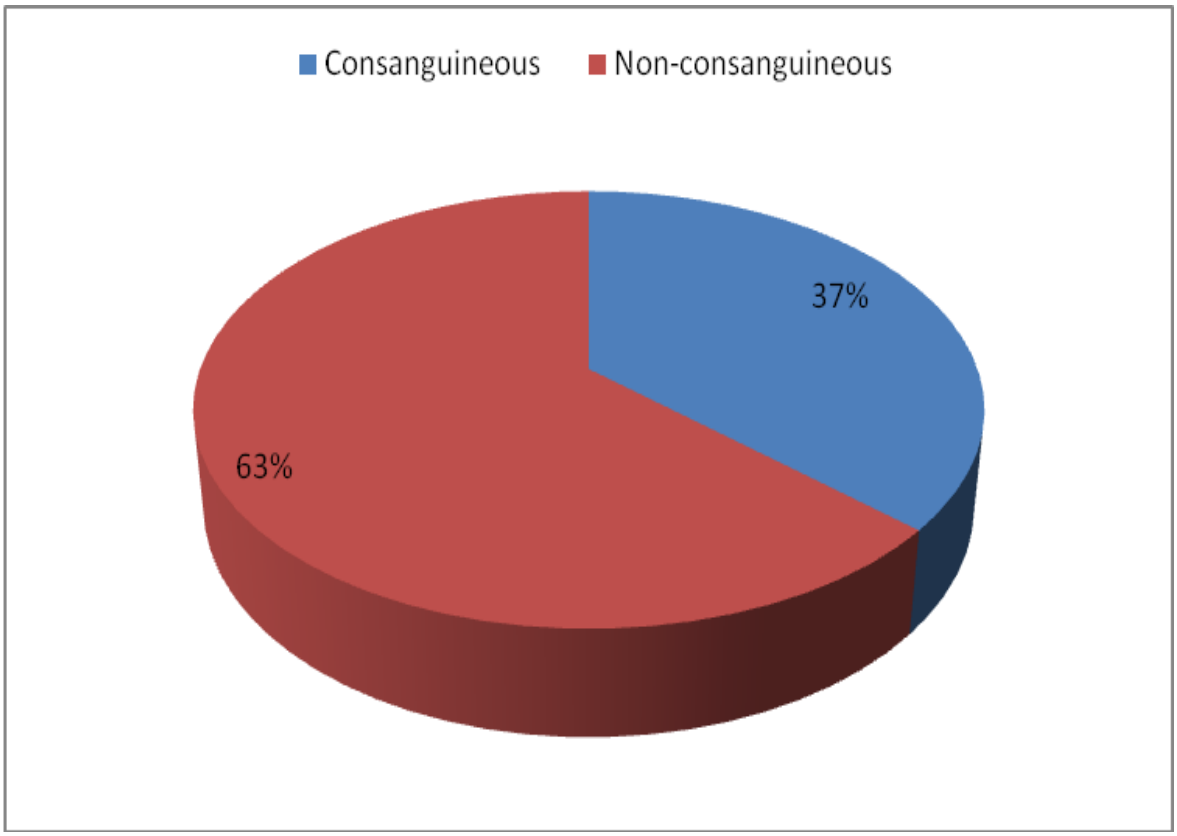

Figure 9: Percentage distributions of type of marriage

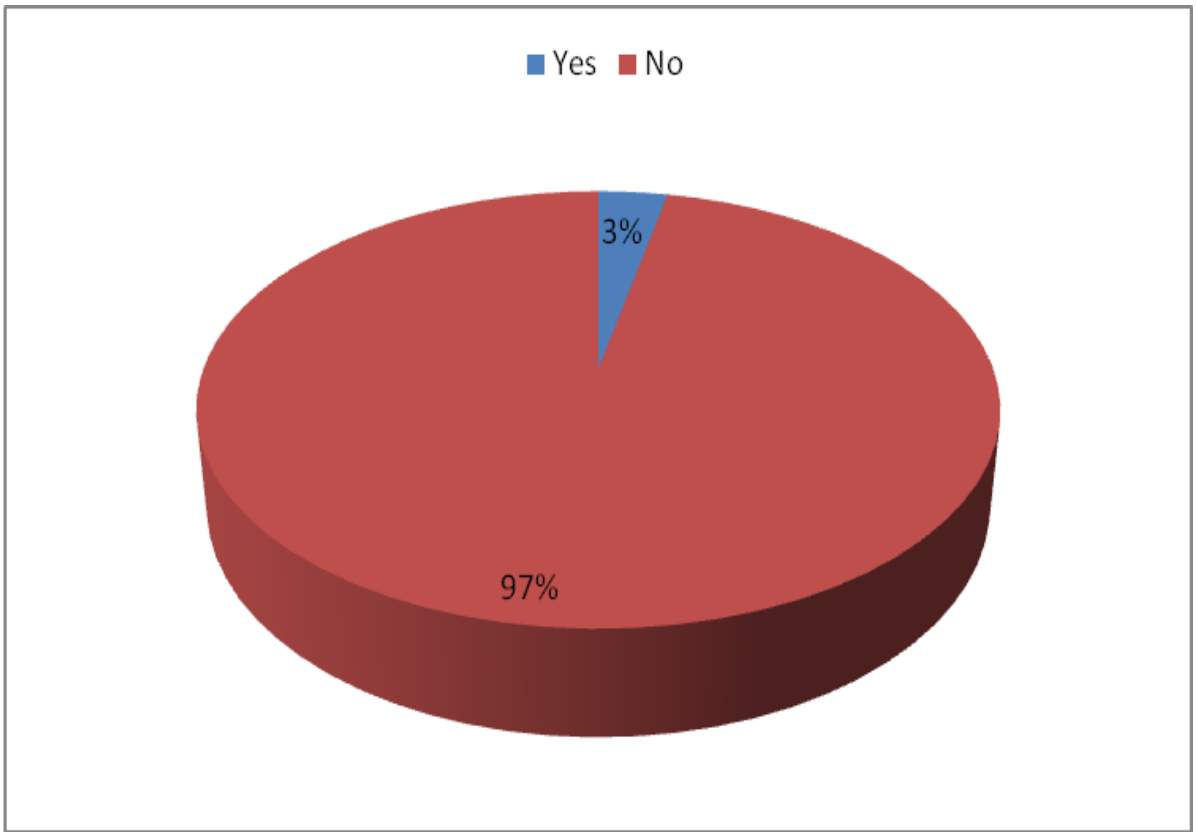

Figure 10: Percentage distributions of previous experience of mothers

SECTION B

Table 2: Assessment of Pretest and post test level of knowledge among mothers.

n=30

Knowledge	Inadequate (<50%)		Moderately Adequate (50 – 75%)		Adequate (>75%)	
	No.	%	No.	%	No.	%
Pretest	24	80	6	20	0	0
Post Test	0	0	7	23	23	77

As shown in Table 2 shows, in pretest 24(80%) mothers were having inadequate knowledge, 6(20%) had moderately adequate knowledge.

In post test, 23(77%) gained adequate knowledge and 7(23%) had moderately adequate knowledge.

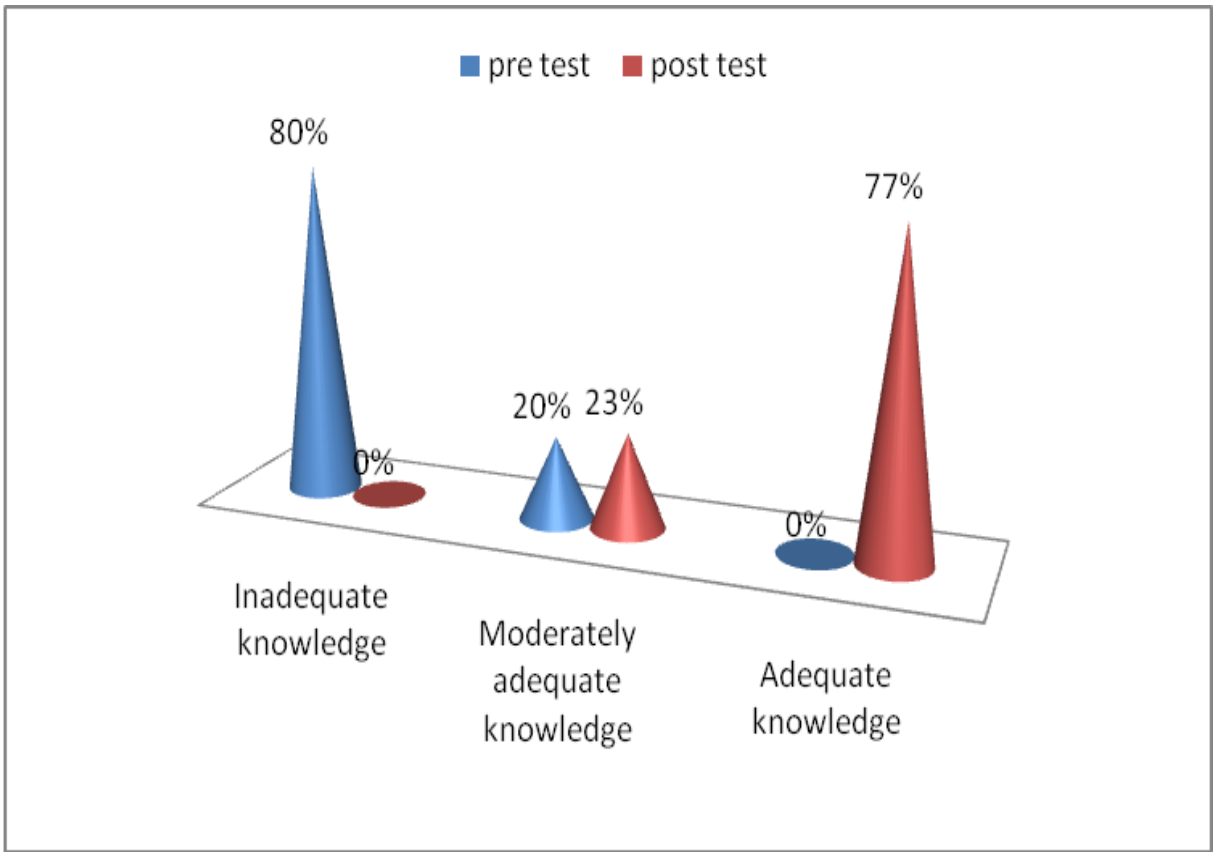

Figure 11: Percentage distributions of pre test and post test level of knowledge

SECTION C

Table 3: Comparison of pretest and post test level of knowledge among mothers

n=30

Knowledge	Mean	S.D	't' Value
Pretest	6.86	9.56	25.32***
Post Test	16.43	2.078	(S)

***p<0.001, S – Significant

The above table depicts the mean and standard deviation of pre and post test level of knowledge.

In this pretest mean was 6.86 and standard deviation was 9.56, whereas in post test mean was 16.43 and standard deviation 2.078. The mean difference is 9.57. The effect of Information Education Communication was examined by employing paired't' test with't' value of 25.32 which is highly significant at level of p< 0.001.

It denotes that there was a significant improvement in the level of knowledge among mothers after giving Information education communication package. Hence the null hypothesis was rejected.

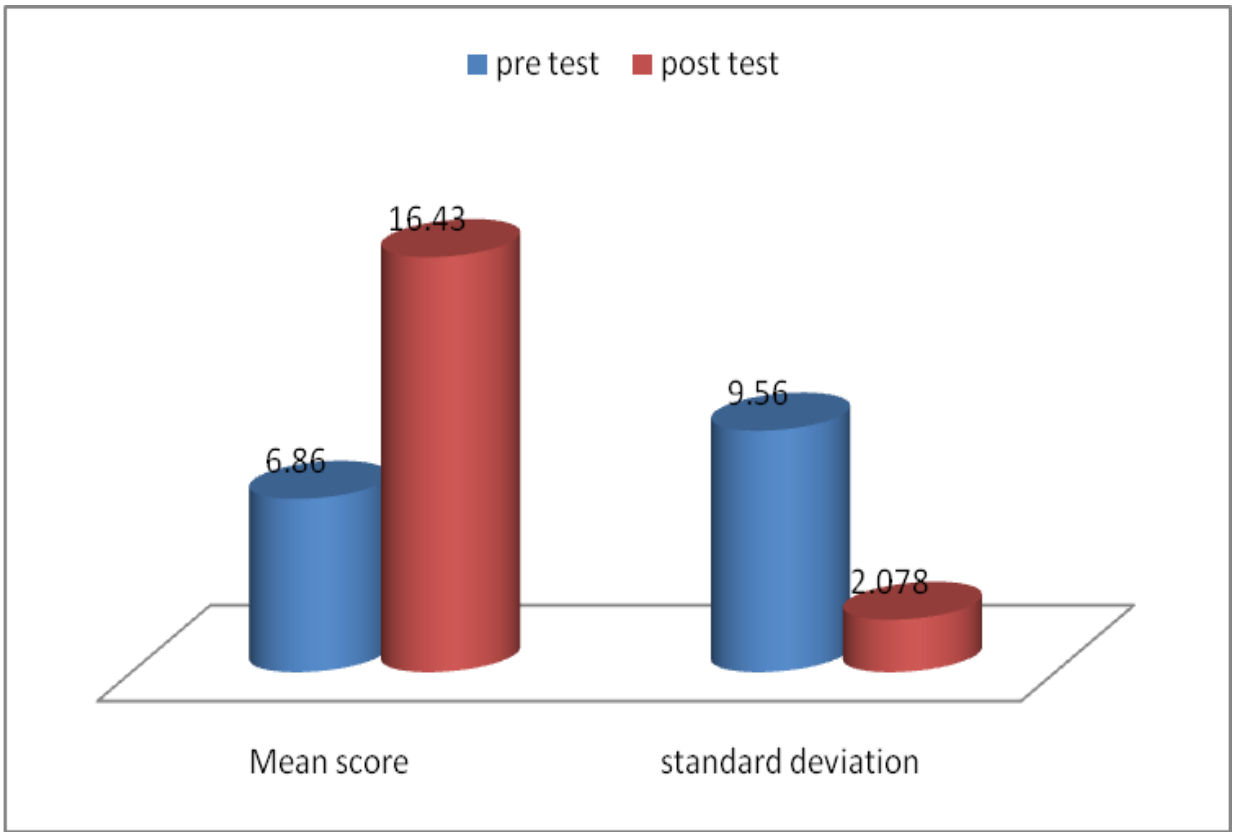

Figure 12: mean score and standard deviation of pretest and post test level of knowledge

SECTION D

Table 4: Association of post test level of knowledge with their demographic variables

n=30

Demographic Variables	Inadequate (<50%)		Moderately Adequate (50 – 75%)		Adequate (>75%)		Chi-Square Value
	No.	%	No.	%	No.	%	
Age of child							
0 - 3 yrs	0	0.00	2	6.67	11	36.67	$\chi^2 = 5.93$
3 - 6 yrs	0	0.00	3	10.00	3	10.00	d.f = 3
6 - 9 yrs	0	0	1	3.33	3	10.00	**N.S**
9 - 12 yrs	0	0	1	3.33	6	20.00	
Sex of child							$\chi^2 = 1.66$
Male	0	0	2	6.67	13	43.34	d.f = 1
Female	0	0	5	16.66	10	33.33	N.S
Age of the mother							
20 - 25 yrs	0	0	0	0	5	16.66	$\chi^2 = 1.91$
25 - 30 yrs	0	0	3	10.00	5	16.66	d.f =3
30 - 35 yrs	0	0	3	10.00	9	30.00	N.S
35 - 40 yrs	0	0	1	3.33	4	13.34	
Education of mother							
Illiterate	0	0	1	3.33	0	0.00	$\chi^2 = 16.8$
Schooling	0	0	4	13.34	5	16.67	d.f = 3
Graduate	0	0	1	3.33	6	20.00	S***
Post graduate	0	0	1	3.33	12	40.00	
Occupation of mother							
Unemployed	0	0	4	13.34	4	13.34	$\chi^2 = 4.59$
Labour	0	0	0	0.00	2	6.67	d.f = 4
Self employed	0	0	2	6.67	5	16.66	N.S
Private worker	0	0	1	3.33	7	23.33	
Government worker	0	0	0	0.00	5	16.66	
Religion							
Hindu	0	0	4	13.33	12	40.00	$\chi^2 = 1.89$
Muslim	0	0	3	10.00	6	20.00	d.f = 2
Christian	0	0	0	0.00	5	16.66	N.S
Others	0	0	0	0.00	0	0.00	
Monthly Income of the family							$\chi^2 = 2.87$
Less than Rs.5000	0	0	2	6.67	1	3.33	d.f = 2
Rs.5000 – 10000	0	0	1	3.33	1	3.33	N.S
Above Rs.10000	0	0	4	13.33	21	70.00	
Type of marriage							$\chi^2 = 0.77$
Consanguineous	0	0	4	13.33	7	23.33	d.f = 1
Non-consanguineous	0	0	3	10.00	16	53.33	N.S
Do you have any previous experience?							
Yes	0	0	0	0.00	1	3.33	N.S
No	0	0	7	23.33	22	73.34	

***p<0.001, S – Significant, N.S – Not Significant

The above table 4 reveals that education level of mother had shown that statistically significant association with the level of knowledge. Other demographic variables such as age of child, sex of child, age of mother, education of mother, occupation of mother, religion, monthly income of family, previous experience did not have the association.

CHAPTER – V

DISCUSSION

This chapter discusses the findings of the study derived from statistical analysis with its pertinence of the objectives and related literature of the study. The problem stated was a study to assess the effectiveness of Information Education communication package on home care management for mothers of children subjected to cardiothoracic surgery in selected Hospital, Mogappair, Chennai, 2010-2011.

The objectives of the study were as follows:

1. To assess the pretest level of knowledge on home care management subjected to cardiothoracic surgery among mothers of children.
2. To assess the post test level of knowledge on home care management subjected to cardiothoracic surgery among mothers of children after Information education communication package.
3. To compare the effectiveness of Information education communication package between pretest and post test level of knowledge among mothers on home care.
4. To associate the post test level of knowledge on home care management among mothers of children's with their demographic variables.

Frequency and percentage distribution of demographic variables in were as follows:

Nearly 13 (43.33%) were in the age group of 0-3 years, 6 (20%) were in 3-6 years, 4 (13.33%) were in 6-9 years, and 7 (23.33%) were in between 9-12 years.

Regarding their sex male 15 (50%) and female 15(50%).

Considering age of mother between 30-35 years were 12 (40%), 25-30 years 8 (26.67%) and both 20-25 years and 35-40 years were 5 (16.67%)

With respect to their education 13(43.33%) were post graduates out of 30 mothers, 9(30%) were studied up to schooling, 7 (23.33%) were graduates only 1 (3.33%) was illiterate.

Regarding their occupation 8(26.67%) were unemployed and equally were private workers 8 (26.67%), 7 (23.33%) were self employed, and 5 (16.67) were government workers. With respect to their religion 16 (53.33%) were Hindu, 9 (30%) were Muslim and 5 (16.67%) were Christian.

Regarding their family Income 25 (33.33%) were earning above Rs.10,000, 3(10%) were getting less than Rs.5000 and 2 (6.67%) were earning Rs. 5,000 - 10,000. Regarding their type of marriage 19 (60%) were non-consanguineous marriage, 11 (40%0 were undergone consanguineous marriage out of 30 mothers.

Considering their previous experience 1(3.33%) was previously experienced out of 30 mothers and 29 (96.67%) were not experienced.

The first objective was to assess the pretest level of knowledge on home care management subjected to cardiothoracic surgery among mothers of children.

The analysis revealed that 24(30%) mothers were having inadequate knowledge, 6 (20%) had moderately adequate knowledge.

This is consistent with the study conducted by DKL Cheuk et. al., (2003),He too selected 156 parents of children with relatively simple congenital heart defects w from the outpatient clinic of a tertiary cardiac centre through a serious of assessments, they were found to be parents of children with congenital heart diseases who had important knowledge gaps.

The second objective was to assess the post test level of knowledge on homecare management among mothers of children after IEC.

The analysis of post test revealed that most of the mothers had gained adequate knowledge 23(77%), and 7 (23%) had moderately adequate knowledge after showing video clippings and distribution of pamphlets to the mothers.

The study findings were consistent with the study finding of long s L et. al., (2004), who revealed that the intervention group had better confidence than the control group at one week and one month after the infant's discharge ($P<0.05$)

The third objective was to compare the effectiveness of IEC between pre and post test level of knowledge among another's of children on home care.

The data analysis revealed that there was a significant improvement in the level of knowledge elicited in the post test. This was statistically shown in the mean value which increased from 6.86 to 16.43 and standard deviation reduced from 9.56 to 2.078. The't' value was 25.32 and was found to be significant at P <0.001 level.

The study findings were found to be consistent with the findings of Robert S. Greenbery (2000), who narrated that the effect of seeing the videotape was assessed by comparing post pretest score differences using paired t - test. Paired t -test within groups demonstrated a significant difference in group 1 (22.4% ± 16.5%, P < 0.0001), whereas group 2 scores changed to a much lesser degree (2.7% ± 8.3%, P =0.0271).

The fourth objective was to associate the post test level of knowledge among mothers of children with their selected demographic variables.

The study findings were found to be consistent with the study findings of Ismee A. Williams et.al. (2004), who recommended that prenatal diagnosis maternal education p (0.01) had independent effects on the score.

The analysis revealed that there was very high significant association of demographic variable such as Educational level of mother $x^2 = 16.8$ at P <0.001 level.

The analysis revealed that there was significant difference in the level of knowledge who received Information Education Communication package. Hence Null Hypothesis H01 stated that there is no significant difference in knowledge on home care management subjected to cardio thoracic surgery who received information education communication package was rejected.

The conceptual frame work was based on Modified Callista Roy's adaptation Model (1991). It has 3 components, which includes input, throughput, and output. First component of the model involves input which is identified as estimate which can come from the environment or from within a person. In this study, the investigator does pre assessment in input such as pre assessment of demographic variables such as Age of child, sex of child, Age of mother, Education, occupation, Religion, Monthly Income of the

family, Type of marriage, previous experience and the structured questionnaires. The second component, throughput Information education communication package (video clippings and pamphlet) was given to the client. Third component was output which is the outcome of the system. Hence the researcher adopted this model and the model guided the researcher to take likelihood action.

The overall findings of the study showed that Information education communication package was effective to improve the mothers' knowledge on Home care management subjected to cardiothoracic surgery.

The assumptions of the study made were,

1. Mothers may not have adequate knowledge about home care management.
2. Mothers may gain knowledge after Information education communication package on homecare management subjected to cardiothoracic surgery.

The first assumption that mothers may not have adequate knowledge about home care management because the present study results also have proved that 24(80%) of mothers had Inadequate knowledge, 6 (20%) had moderately adequate knowledge.

The second assumption that the mothers may gain knowledge after Information education communication package on home care management subjected to cardiothoracic surgery because the present study results also proved that 23 (77%) of mothers were gained adequate knowledge and 7(23%) were moderately adequate knowledge.

This effective and efficient teaching medium may be useful in improving knowledge of Mothers.

CHAPTER – VI

SUMMARY, RECOMMENDATION, NURSING IMPLICATIONS AND LIMITATION

SUMMARY

This chapter deals with the summary, conclusion, implication, recommendation and limitation.

Congenital heart diseases (CHD) are relatively common with a prevalence ranging from 3.7 to 17.5 per 1000 live births. According to a status report on Congenital heart diseases in India, 10% of the present infant mortality may be accounted for by Congenital heart diseases. According to a large hospital based study from India, the incidence of Congenital heart disease is 3.9/1000 live births. In community based studies from India, the prevalence of congenital heart diseases ranges from 0.8-5.2/1000 patients. Parental understanding of chronic illness is associated with improved compliance with medical care. The growth of children of parents with good knowledge was not better than that of children of parents with poor knowledge.

The objectives of the study were

1. To assess the pre test level of knowledge on home are management subjected to cardiothoracic surgery among mothers.
2. To assess the post test level of knowledge on home care management subjected to cardiothoracic surgery among mothers after Information education communication Package.
3. To compare the effectiveness of information education communication between Pre test and post test level of knowledge among mothers.
4. To associate the post test level of knowledge on home care subjected to cardiothoracic surgery among mothers with their demographic variables.

The Null hypothesis was

H_{01}: There is no significant difference in the level of knowledge on home care management subjected to cardiothoracic surgery who received information education communication.

The assumptions of the study were

1. Mothers may not have adequate knowledge about home care management
2. Mothers may gain knowledge after information education communication package on Home care subjected to cardio thoracic surgery.

An extensive review of literature was alone which enabled the investigator for study in depth related problems to develop conceptual framework, to construct the tool and the analysis of data for interpretation.

The conceptual framework of the study was based on adaptation systems theory model adopted by Callister Roy and it provided the comprehensive framework for achieving the objectives of the study. A pre-experimental one group pretest- posttest design was used and the study was conducted among mothers in frontier lifeline hospital, Chennai.

The tool consisting of demographic variables and the questions related to general knowledge about home care management subjected to cardio thoracic surgery. Reliability of the tool was established by test-retest method.

The pilot study was done in the above stated setting and the findings revealed the feasibility and practicability of the tool and the study. The main study was done after getting final permission from 15.5.2010-15.6.2010. Thirty mothers were taken by Non-probability purposive sampling technique. The data collected was analyzed using descriptive and inferential statistics.

The findings of the study reveals the pre test mean was 6.86 and standard deviation was 9.56, whereas in post test mean was 16.43 and standard deviation was 2.078. the effect of Information Education Communication was examined by employing paired ‘t’ test with ‘t’ value of 25.32 which is highly significant at level of $p< 0.001$.it denotes that there was a significant improvement in the level of knowledge among mothers after giving Information education communication package . Hence null hypothesis was rejected. The demographic variable such as education of mother $x=16.8$ at $p< 0.001$ level alone had significant association whereas there was no significant association between post test level of knowledge with demographic variables such as age

of child, sex of child, age of mother, , occupation of mother, religion, monthly income of family, type of marriage, previous experience.

The study concluded that there is a significant difference in the level of knowledge on home care management subjected to cardiothoracic surgery who received information education communication .Hence the null hypothesis regarding effectiveness of Information Education Communication package was rejected. The study also concluded that there is a significant association between the posttest levels of knowledge with demographic variables.

NURSING IMPLICATIONS

Numerous implications can be drawn from the present study for practice which promotes and creates new dimension to nursing profession.

Nursing Practice

1. Health teaching is an independent nursing intervention; nurses can play a major role in educating mothers on care of child with cardiac surgery.
2. Nurses can understand the behavioral response in each developmental stage during post operative management of a child with cardiac surgery.
3. Nurses can utilize the findings of this study in the practice.

Nursing Education

1. Health teaching module can be used by students to improve the practice of mothers on the basis of needs.
2. Health teaching module can be prepared by the educator for cyanotic and acyanotic conditions separately for enhancing students knowledge.

Nursing Administration

1. The nurse administrator can participate in formulating the policies and protocols related to feeding and medication administration after cardiac surgery.
2. Nurse administrator can disseminate the research knowledge in to the pediatric nurses. So that the mothers will be benefited.

3. Nurse administrator should encourage the community health nurse to follow up the cases.

Nursing Research

1. The present study results can be utilized to conduct a study on a large population.
2. The present study can be utilized to conduct further post operative research studies.

RECOMMENDATIONS

1. A similar study can be conducted in large group of samples.
2. A study can be undertaken to measure the psychological status of the mothers for caring a child with congenital heart defects.
3. A similar study can be conducted on different aspects of home management alone.
4. A follow up study can be done to assess the growth and nutritional status of child after cardiac surgery.

LIMITATIONS

1. The researcher could not generalize the study findings as the sample size small.
2. The researcher does not conduct this study in large group and also for longer duration.

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Sara.pasquali@duke.edu.

mhtml: file://j:/springer link – pediatric cardiology.

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www.medscape.com

www.wikipedia.com

APPENDIX – A

LIST OF EXPERTS FOR CONTENT VALIDITY

1. **Dr.Sathyan, M.B.B.S., D.C.H.,**
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2. **Mrs.Anitha Rajendra babu, R.N,R.M., M.Sc(N).,**
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3. **Mrs. Hebsibah , M.Sc(N).,**
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4. **Mrs. Susan R.N, R.M., M.Sc(N).,**
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   Child Health Nursing,
   Omayal Aachi College of Nursing,
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5. **Mrs. Zealous Mary R.N, R.M., M.Sc(N).,**
   Head of the Department
   Child Health Nursing,
   Madha College of Nursing,
   Kundrathur.

LETTER SEEKING EXPERTS OPINION FOR CONTENT VALIDITY

From

Mrs. K.M.KAMATCHI
M.Sc.(N) I Year,
Vel R.S Medical College – College of Nursing,
Avadi, Chennai – 600 062.

To

Respected Madam/Sir,

Sub: Requisition for expert opinion on suggestion for content validity of the tools.

I am Mrs. K.M.KAMATCHI, a student of M.Sc.(Nursing)- I year at Vel R.S Medical College - College of Nursing, Avadi, Chennai – 62, affiliated to Dr.M.G.R.Medical University, Chennai.

As a partial fulfillment of the requirement in the M.Sc. Nursing Programme, I have to complete a dissertation the topic I have selected is **"A study to assess the effectiveness of Information Education communication package on home care management for mothers of children subjected to cardiothoracic surgery in selected hospital , Chennai- 2010".**

Herewith I am sending the developed tools for content validity and for your expert opinion & valuable suggestions.

Thanking you,

Yours sincerely,

(Mrs. K.M.KAMATCHI)

Enclosures:

1. Statement and objectives of the study
2. Blue print of the tools
3. Content validity certificate

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tools developed by, Mrs. K.M.KAMATCHI M.Sc. Nursing student Vel R.S. Medical College – College of Nursing, Chennai on the topic, "**"A study to assess the effectiveness of Information Education communication package on home care management for mothers of children subjected to cardiothoracic surgery in selected hospital, Chennai- 2010"** is validated by the undersigned and she can proceed with this tool to conduct the main study.

Place :

Date : **Signature**

APPENDIX – B

INTRODUCTION

Dear Participants,

I am**,** Mrs. K.M.KAMATCHI M.Sc(N), II year student from Vel R.S.Medical College - College of Nursing, Avadi, Chennai. I would like to assess the effectiveness of Information Education communication package on home care management for mothers of children subjected to cardiothoracic surgery. I assure that the responses given by you will be used only for my study purpose and strict confidentiality will be maintained. So please feel free in answering the questions. This will be promoting your welfare. So, I request you to kindly give your full co-operation and willingness.

Thanking you.

PART – A

DEMOGRAPHIC VARIABLES

1. Age of child
    a. 0 – 3 yrs
    b. 3 – 6 yrs
    c. 6 – 9 yrs
    d. 9 – 12 yrs

2. Sex of child
    a. Male
    b. Female

3. Age of the mother
    a. 20 – 25 yrs
    b. 25 – 30 yrs
    c. 30 – 35 yrs
    d. 35 – 40 yrs

4. Education of mother
    a. Illiterate
    b. Schooling
    c. Graduate
    d. Post graduate

5. Occupation of mother
    a. Unemployed
    b. Labour
    c. Self employed
    d. Private worker
    e. Government worker

6. Religion
    a. Hindu
    b. Muslim
    c. Christina
    d. Others

7. Monthly income of family
    a. Less than Rs.5000
    b. Rs.5000 – 10000
    c. Above Rs.10000

8. Type of marriage
    a. Consanguineous
    b. Non consanguineous

9. Do you have any previous experience?
    a. Yes
    b. No

PART – B

Please tick the correct answers given below.

1. What is the function of heart?
    a. Pumping out of blood to the other organs
    b. Purifying blood
    c. Controlling other organs
    d. None of the above

2. What is cardiac surgery?
    a. Surgery done in chest
    b. Surgery done in thoracic cavity
    c. Surgery done in lungs
    d. Surgery done in heart

3. What will you do if any dust in the incision site?
    a. Leave as it is
    b. Apply oil
    c. Apply powder
    d. Clean with mild soap and water

4. Which is the abnormal sign of healing process at incision site?
    a. Tingling
    b. Itching
    c. Numbness
    d. Draining of pus

5. When will you start to give shower bath for your children after surgery?
    a. 8 – 10 days (Immediately after suture removal)
    b. 10 – 14 days
    c. 14 – 16 days
    d. 1 month

6. What measures will you take to protect incision site while giving feed?
    a. Cover the incision site with the dress
    b. Do not cover the incision site
    c. Remove dress and cover with cloth
    d. Place the small towel around the neck

7. What type of activities you will prefer for your child?
    a. Mild exercises and light works
    b. Hard works which would put pressure over chest
    c. Competitive Sports
    d. Skate boarding

8. How will you protect your child incision area while coughing and sneezing?
    a. Hold the chest pillow over the incision site
    b. Protect the incision site by holding with hands
    c. Cover the mouth with hands
    d. Do not protect the incision area

9. What will you do if your child is not getting adequate sleep after surgery?
    a. I will be very anxious
    b. Be positive and calm until my child comeback to usual behaviour
    c. I will consult my doctor
    d. I will go to hospital immediately

10. What will you do before touching your child incision site?
    a. Clean my hands with cloth
    b. Clean my hands with water
    c. Clean my hands with soap and water
    d. I won’t clean my hands

11. What type of dress will you prefer your child after surgery?
    a. Loose cloth
    b. Loose, soft clothing
    c. Tight clothing
    d. Tight and weight cloth

12. What will you do when your child got pain in incision site?
    a. I will buy medicine and give
    b. I consult my doctor regarding pain medication
    c. I will do some home remedies
    d. I will take my child to hospital

13. What will you do, if your child had dental infection?
    a. I will do some home remedies
    b. Consult my doctor and give antibiotics
    c. Consult dentist directly
    d. Giving antibiotics

14. What type of diet will you prefer for your child?
    a. Fat rich diet
    b. Salt added diet
    c. Balanced diet with no added salt
    d. Potassium rich diet

15. Which position is not suitable for your child during sleep after surgery?
    a. Prone position
    b. Supine position
    c. Side lying position
    d. Semi – reclined position

16. What will you do if your child is having puffy eyelids, noisy breathing and increased sweating?
    a. Take my child to hospital
    b. I consult my doctor through phone
    c. I will go by follow up time
    d. I will see locally available doctor

17. What will you do, if you are missing one dose of medicine?
    a. I will give immediately
    b. I will skip the dose and give the other dose

c. I won’t give next dose also
d. I will give the missed dose with next dose

18. Where will you keep the medicine?
a. Over the table
b. Out of reach of child
c. Open cupboard
d. Locked cabinet

19. What will you do, if any accidental over dose of medicine?
a. I consult my doctor immediately
b. I will go to hospital during follow up time
c. I won’t do anything
d. I will take my child to nearest hospital

20. When will you take your child to the crowded places after surgery?
a. 2 – 3 weeks
b. 1 week
c. 2 days
d. 1 month

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Å½ì¸õ.

¿¡ý §Åø ¬÷.±Š ÁÕòÐÅ ¸øæÃ¢-¦ºÅ¢Ä¢Â÷ ¸øæÃ¢Â¢ø þÃñ¼¡õ ¬ñÎ ÓÐ¸¨Ä ¦ºÅ¢Ä¢Â÷ ¸øÅ¢ ÀÂ¢Öõ Á¡½Å¢. ¿¡ý ±ý ÀÊôÀ¢ý ´Õ ÀÌ¾¢Â¡¸ **¾¸Åø ¸øÅ¢ ÁüÚõ «Å÷¸Ç¢ý ¾¸Åø ÀÃ¢Á¡üÈõ ãÄõ þ¾Â «Ú¨Åî º¢¸¢ï¨ºìÌô À¢ý ÌÆó¨¾¸¨Ç Å£ðÊø ÀÃ¡ÁÃ¢ôÀÐ ÀüÈ¢ ¾¡öÁ¡÷¸û ¦ÀüÚûÇ «È¢×ò¾¢È¨É °ìÅ¢ôÀÐ** ÀüÈ¢Â ´Õ ¬ö¨Å ¿¼òÐ¸¢ý§Èý. þ¾ý ¦¾¡¼÷À¡¸ ¿¡ý ¾í¸¨Ç ±ÉÐ ¬öÅ¢ý Àí§¸üÀ¡ÇÃ¡¸ þ¨½òÐì ¦¸¡ûÇ Á¢¸ ¾¡ú¨ÁÔ¼ý §¸ðÎì¦¸¡û¸¢§Èý. þ¾ý ¦¾¡¼÷À¡¸ ¿¡ý §¸ðÌõ §¸ûÅ¢¸Ùì Ì ºÃ¢Â¡É ¯í¸û À¾¢¨Ä ¦¾Ã¢Å¢ì¸×õ. ¯í¸û À¾¢¨Ä ¿¡ý ±ý ¬öÅ¢ü¸¡¸ ÁðÎ§Á ÀÂý ÀÎòÐ§Åý ±ýÚ ¯Ú¾¢ÂÇ¢ì¸¢§Èý.

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பகுதி–அ

1. குழந்தையின் வயது

   அ. 0–3 வருடம்

ஆ. 3–6 வருடம்

இ. 6–9 வருடம்

ஈ. 9–12 வருடம்

2. குழந்தையின் பாலினம்

அ. ஆண்

ஆ. பெண்

3. தாயின் வயது

அ. 20 முதல் 25 வருடம்

ஆ. 25 முதல் 30 வருடம்

இ. 30 முதல் 35 வருடம்

ஈ. 35 முதல் 40 வருடம்

4. தாயின் கல்வித் தகுதி

அ. கல்வியறிவின்மை

ஆ. பள்ளிப்படிப்பு

இ. இளநிலை

ஈ. முதுநிலை

5. தாயின் தொழில்

அ. கூலித் தொழிலாளி

ஆ. சுயவேலை

இ. வேலையின்மை

ஈ. தனியார் நிறுவன ஊழியர்

உ. அரசு வேலை

6. மதம்

அ. இந்து

ஆ. முஸ்லீம்

இ. கிறிஸ்துவம்

ஈ. மற்றவை

7. மாத குடும்ப வருமானம்

அ. ரூ.5000க்கும் கீழ்

ஆ. ரூ.5000–10,000 வரை

இ. ரூ.10,000க்கும் மேல்

8. எவ்வகையான திருமணம்

அ. சொந்தத்தில் திருமணம்

ஆ. சொந்தம் இல்லை

9. முன் அனுபவம் ஏதேனும் உள்ளதா ?

அ. ஆம்

ஆ. இல்லை

பகுதி–ஆ

(கீழே கொடுக்கப்பட்டுள்ள கேள்விகளுக்கு சரியான விடையை குறியிட்டு (✔) காட்டவும்)

1. இதயத்தின் முக்கியமான வேலை என்ன ?

   அ. சுருங்கி விரிவதன் மூலம் உடலில் மற்ற உறுப்புகளுக்கு இரத்தத்தை செலுத்துகிறது.

   ஆ. இரத்தத்தை சுத்தம் செய்கிறது.

   இ. மற்ற உறுப்புகளை கட்டுப்படுத்துகிறது.

   ஈ. மேற்கூறிய எதுவும் இல்லை.

2. இதய அறுவை சிகிச்சை என்றால் என்ன ?

   அ. மார்பில் செய்யும் அறுவை சிகிச்சை

   ஆ. நெஞ்சுக் குழியில் செய்யும் அறுவை சிகிச்சை

   இ. நுரையீரலில் செய்யும் அறுவை சிகிச்சை

   ஈ. இதயத்தில் செய்யும் அறுவை சிகிச்சை

3. காயத்தில் அழுக்கு இருந்தால் என்ன செய்வீர்கள் ?

   அ. அப்படியே விட்டு விட வேண்டும்.

   ஆ. எண்ணெய் தேய்க்க வேண்டும்.

   இ. பவுடர் போட வேண்டும்.

   ஈ. சோப்பு மற்றும் தண்ணீரால் சுத்தம் செய்ய வேண்டும்.

4. பின்வருவனவற்றுள் காயம் ஆறாததற்கு அறிகுறி என்ன ?

   அ. குத்தல்

   ஆ. அரித்தல்

   இ. மறுத்துப் போதல்

   ஈ. சீழ்வடிதல்

5. குழந்தையை அறுவை சிகிச்சைக்குப் பிறகு எப்போது குளிக்க வைக்க வேண்டும் ?

   அ. 8 முதல் 10 நாட்களுக்குள் (தையல் பிரித்தவுடன்)

   ஆ. 10 முதல் 14 நாட்களுக்குள்

   இ. 14 முதல் 16 நாட்களுக்குள்

   ஈ. ஒரு மாதம் கழித்த பிறகு

6. குழந்தையை உணவு கொடுக்கும் போது காயத்தை பாதுகாக்க என்ன செய்ய வேண்டும்

   அ. காயமுள்ள பகுதியை துணியால் மூட வேண்டும்

   ஆ. காயமுள்ள பகுதியை மூடக் கூடாது.

இ. ஆடையை கழற்றிவிட்டு, துணியால் மூட வேண்டும்.

ஈ. கழுத்தைச் சுற்றி சிறு துணியால் மூட வேண்டும்.

7. எவ்விதமான செயல்பாடுகள் செய்ய உங்கள் குழந்தையை அனுமதிப்பீர்கள் ?

அ. சிறு உடற்பயிற்சி மற்றும் இலேசனா வேலைகள்.

ஆ. கடுமையான வேலை மற்றும் மார்பில் அழுத்தம் தரக்கூடிய வேலைகள்

இ. விளையாட்டுப் போட்டிகள்

ஈ. சறுக்கு விளையாட்டு

8. இருமல் மற்றும் தும்மல் வரும் போது காயமுள்ள பகுதியை எவ்வாறு பாதுகாக்க வேண்டும் ?

அ. காயமுள்ள பகுதியில் தலையணையை வைத்து அழுத்திப் பிடிக்க வேண்டும்.

ஆ. காயமுள்ள பகுதியை கையால் அழுத்திப் பிடிக்க வேண்டும்.

இ. கையால் வாயை மூட வேண்டும்.

ஈ. காயமுள்ள பகுதியை பாதுகாக்கக் கூடாது.

9. அறுவை சிகிச்சைக்கு பிறகு உங்கள் குழந்தை சரிவரத் தூங்கவில்லை என்றால் என்ன செய்விர்கள் ?

அ. மிகவும் கவலையடைவேன்.

ஆ. குழந்தை தன் பழைய நிலைக்கும் திரும்பும் (1 முதல் 2 வாரம்)

இ. பொறுமையுடனும் அமைதியாகவும் இருப்பேன்.

ஈ. மருத்துவரிடம் ஆலோசனை கேட்பேன்.

10. உங்கள் குழந்தையின் வடுவை தொடுவதற்கு முன்பாக என்ன செய்ய வேண்டும் ?

அ. துணியால் கையை துடைத்துக் கொள்ள வேண்டும்.

ஆ. தண்ணீரால் கையை கழுவ வேண்டும்.

இ. சோப்பு மற்றும் தண்ணீரால் கையை கழுவ வேண்டும்.

ஈ. கையை சுத்தம் செய்ய மாட்டேன்.

11. எவ்விதமான உடையை உங்கள் குழந்தைக்கு அணிவிப்பீர்கள் ?

அ. தளர்வான உடை

ஆ. தளர்வான மற்றும் மிருதுவான உடை

இ. இறுக்கமான உடை

ஈ. இறுக்கமான மற்றும் எடையுள்ள எடை

12. உங்கள் குழந்தைக்கு காயத்தல் வலி இருந்தால் என்ன செய்வீர்கள் ?

அ. கடையில் மருந்து வாங்கி கொடுப்பேன்.

ஆ. மருத்துவரிடம் கேட்டு விட்டு மருந்து கொடுப்பேன்.

இ. வீட்டு வைத்தியம் செய்வேன்.

ஈ. மருத்துவமனைக்கு அழைத்துச் செல்வேன்.

13. உங்கள் குழந்தைக்கு பல்வலி இருந்தால் என்ன செய்வீர்கள் ?

அ. வீட்டு வைத்தியம் செய்வேன்.

ஆ. மருத்துவரிடம் ஆலோசனை கேட்டு மருந்து கொடுப்பேன்.

இ. பல் மருத்துவரை அணுகுவேன்.

ஈ. நானே மருந்து கொடுத்து விடுவேன்.

14. எவ்விதமான உணவை உங்கள் குழந்தைக்கு நீங்கள் கொடுக்கலாம் ?

அ. கொழுப்புச் சத்து அதிகம் உள்ள உணவு

ஆ. உப்பு சேர்த்த உணவு

இ. சரிவிகித உணவு மற்றும் உப்பு சேர்க்காத உணவு

ஈ. பொட்டாசியம் அதிகம் உள்ள உணவு

15. அறுவை சிகிச்சை பிறகு எவ்விதமான நிலையில் உங்கள் குழந்தை தூங்க அனுமதிக்க மாட்டீர்கள் ?

அ. குப்புறப்படுத்தல்

ஆ. நேராகப் படுத்தல்

இ. பக்கவாட்டில் சாய்ந்து படுத்தல்

ஈ. சாய்ந்த நிலையில் படுத்தல்

16. கண்வீக்கம், சுத்தமாக மூச்சு விடுதல் மற்றும் அதிகமாக வியர்த்தல் இருந்தால் என்ன செய்வீர்கள் ?

அ. உடனடியாக மருத்துவமனைக்கு அழைத்துச் செல்ல வேண்டும்.

ஆ. மருத்துவரிடம் ஆலோசனை செய்வேன்.

இ. மருத்துவர் கொடுத்த தேதியில் சென்று பார்த்துக் கொள்வேன்.

ஈ. அருகில் உள்ள மருத்துவரிடம் அழைத்துச் செல்வேன்.

17. ஒரு வேலை மருந்து கொடுக்க தவறினால் என்ன செய்வீர்கள் ?

அ. உடனடியாக கொடுத்து விடுவேன்.

ஆ. அந்த மருந்தை அப்படியே விட்ட விட்டு, அடுத்த வேலை மருந்து மட்டும் கொடுப்பேன்

இ. அடுத்த வேலை மருந்தும் கொடுக்க மாட்டேன்.

ஈ. விடுபட்ட மருந்தை அடுத்த வேலை மருந்துடன் சேர்த்துக் கொடுப்பேன்.

18. மருந்துகளை எங்கே வைப்பீர்கள் ?

அ. மேசைக்கு மேல்

ஆ. குழந்தைக்கு எட்டாத இடத்தில்

இ. மாடத்தில்

ஈ. பூட்டிய மாடத்தில்

19. குழந்தை தவறுதலாக அதிகமான மருந்து எடுத்துக் கொண்டால் என்ன செய்வீர்கள் ?

அ. மருத்துவரிடம் ஆலோசனை கேட்பேன்.

ஆ. மருத்துவர் சொன்ன தேதியில் சென்று பார்ப்பேன்.

இ. எதுவும் செய்யக் கூடாது.

ஈ. அருகில் உள்ள மருத்துவமனைக்கு உடனடியாக அழைத்து செல்ல வேண்டும்.

20. அறுவை சிகிச்சைக்குப் பிறகு பொது இடங்களுக்கு எப்போது அழைத்துச் செல்வீர்கள் ?

அ. 2 முதல் 3 வாரம் கழித்து

ஆ. ஒரு வாரம் கழித்து

இ. இரண்டு நாட்களுக்குப் பிறகு

ஈ. ஒரு மாதம் கழித்து

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06/05/2010

To

The Personnel Manager - HR
Dr. K.M. Cherian's Frontier lifeline Hospital
Mogappair, Chennai.

Sub: Seeking permission for conducting main study.

Respected Sir/Madam,

This is to introduce **Mrs..K.M.Kamatchi (Child Health Nursing) Master Degree Nursing student** of this college. She has selected the following topic for her research study to be submitted to the Tamil Nadu Dr. MGR medical university as partial fulfillment of the master degree in nursing program.

The topic for the study is, **"A Study to Assess the Effectiveness of Information Education Communication on Home Care management of Peadiatric Cardio Thoracic Surgery among parents of Children in Dr.K.M. Cherian's Frontier Lifeline Hospital,2010 "**

She is interested in conducting the study at your esteemed community.

I assure you that our student will abide by the rules and regulations of the setting. I request your at most help in regard to the same.

Thanking you,

Place

Date 25/5/10

Mrs.M.Anuradha
PRINCIPAL

Permission Granted for period of one month, Starting 15th May 2010 to 15th June 2010.

CH-HR.

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CERTIFICATE OF ENGLISH EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation work **"A Study to assess the effectiveness of information education communication package on home care management of cardiothoracic surgery among parents of children in selected setting"** done by **Mrs.K.M.Kamatchi,** II Year M.Sc., (Nursing) Student of Vel R.S. Medical College – College of Nursing, Chennai, is edited for English Language appropriateness by _____

Name : S.RAMALINGAM.

Signature :

S. RAMALINGAM, M.A., M.Phil., B.Ed.,
P.G. Asst. in English
Govt. G. Hr. Sec. School,
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CERTIFICATE OF TAMIL EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Tamil version of tool used for the dissertation work **"A Study to assess the effectiveness of information education communication package on home care management of cardiothoracic surgery among parents of children in selected setting"** done by Mrs.K.M.Kamatchi, II Year M.Sc., (Nursing) Student of Vel R.S. Medical College – College of Nursing, Chennai is edited for Tamil Language appropriateness by _____.

Name : C. ANBALAGAN

Signature :

Introduction

Welcome to everyone. Child is God Gift. It is our responsibility to maintain child's health. After surgery you should take care of your child at home very carefully.

Why Heart is important for human being?

Heart is very important organ in our body. When the heart is pumping, all the other body organs are getting adequate blood supply and then only we can able to survive for long time.

What is meant by cardiothoracic surgery?

Cardiothoracic surgery is opening the sternum and doing surgery in the heart.

Home care management

Parents need to learn about the home care management of cardio thoracic surgery for children which includes care of the incision, activities, nutritional support and how to safely administer prescribed medications.

Caring for your child's incision

- It is important to take very good care of your child's incision. This will help the scar heal nicely.
- Keep the incisions dry. But if the incision becomes dirty, clean it off with a mild soap and water and pat it dry.
- Do not apply any lotions or powder to the incision for 2 weeks after surgery.
- Make sure your child wears loose, soft clothing. Girls can wear a soft bra, without underwears, for support and to protect the incision.
- Check the incision daily for redness, swelling, and drainage.
- A small amount of yellow or dark bloody drainage from the incisions may occur.
- Tingling, itching, and numbness are normal feelings at the incision, and they will go away in time.
- Chin-rubbing and tight-clothing can make the incision red and sore.
- A tub bath or shower may be taken about 8-10 days after surgery i.e., immediately after suture removal.
- Make sure the incision is protected from sunlight. Have your child wear a shirt and sunblock while outside. For six months after surgery.
- The scar may stand out more for the first 6 months after surgery. You will not notice it as much by 6 to 12 months after surgery.
- Always cover the incision when your child is eating or drinking. For babies, use a bib to keep drool and dribble off the incision.
- The shape of the chest may look different after surgery. This will change over time.

Activities

- Some guidelines for your child's activity at home. Children recover in their own time. For the first two to three days at home your child may want to nap several times a day. Encourage a slow increase in exercise.
- The breastbone (Sternum) needs time to heal during the first 6 weeks after surgery. Your child should not be involved in rough play or activities such as bicycling, climbing, skateboarding, or contact sports. Avoid activities which would put pressure on the child's chest or cause a blow to the chest.
- Protect the incision by making sure it is covered by the chest pillow while traveling and coughing.
- Do not use school bags for 8 weeks after surgery. Ask the school for another set of books so your child does not have to carry books home.
- For the first two weeks, avoid pulling up or picking your child up under the arms.
- Children are welcome to have family and friends over to see them after surgery. But avoid using day care, sending your child to school, or going to crowded places such as mails and churches for the first two to three weeks after surgery.
- Some children have trouble sleeping for 1 to 2 weeks after surgery. Your child may also want to cling to you more than usual. Being positive and calm with your child will help to get your child back to usual behaviour.
- It is very important for everyone to wash their hands before caring for your child. This will prevent your child from picking up germs from others.
- Your child may continue to have mild pain after going home. Any medicine which is advised by the doctor during discharge can be given for discomfort. Call your doctor if the pain becomes worse or if the medicine does not help.
- It may be several days after you go home before normal bowel habits return.
- Call your nurses or doctor if you have any questions about this.

Call your doctor for any of the following:

- Temperature about 101°F, or above 38.3°C.
- Increased sweating
- Vomiting
- Puffy eyelids
- Grunting, noisy breathing
- Rattling in the chest that's felt when placing your hand on your child's chest
- Difficulty waking your child
- Child doesn't act right
- Increased tiredness
- Poor appetite
- Not wetting diapers
- New cough
- Change in incision: color of drainage, redness, swelling
- Incision opens
- Increased pain

Immunizations

Most children can continue their usual immunizations about 2 months after surgery. Talk to your child's pediatrician about this.

Dental Care

Routine dental care should be delayed 4-5 months after surgery whenever possible. If any dental infection consult dentist directly.

Diet and Nutrition

Most children who have had heart surgery may return to their normal diet with no changes when they go home. In general, balanced diet is best for everyone.

Some children with cardiac problems get tired easily. Some children need more calories and/or smaller more frequent feelings. They may take longer to eat.

Play Time

These play ideas can help your child at home. Play can help to reduce anger and fear. If your child is upto 5 yrs, you can give the play items such as rattles, music and musical toys, mobiles, bubbles, videos and books. A soft touch play items are helpful.

If your child is school age children mean can give books, music, videos, using handled video games, puzzles, board games, magazines, playdough, legos, paper and card games.

Note for School

You can get a note for your child's school from your doctor's office or from the cardiothoracic nurse. The note will explain what kind of activity limits your child may have, as well as whether any medicine needs to be taken during school hours.

Follow up Care

You will need to make appointments with the cardiologist, the cardiac surgeon, and your pediatrician as needed.

Phone Numbers

You can get your hospital and also cardiologist and cardiac surgeon phone number.

Administering Medications

- Maintain regular intervals of the drug.
- Use a diary to mark off each dose that is to be given.
- Administer the drug carefully by slowly directing it on the side and back of the mouth.
- Do not mix it with other foods or fluids, since refusal to consume these results inaccurate intake of the drug.
- If the child has teeth, give water after administering the drug: whenever possible, brush the teeth to prevent tooth decay from the sweetened liquid.
- If a dose is missed and more than 4 hours has elapsed, withhold the dose and give the next dose at the regular time. If less than 4 hours elapsed, give the missed dose.
- Do not increase or double the dose for missed doses.
- Keep medicines in safe place, preferably a locked cabinet.
- In case of accidental over dose of medicine. Call the nearest hospital immediately.

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PARENTS INFORMATION GUIDELINES

FOR CHILD AFTER CARDIAC SURGERY